

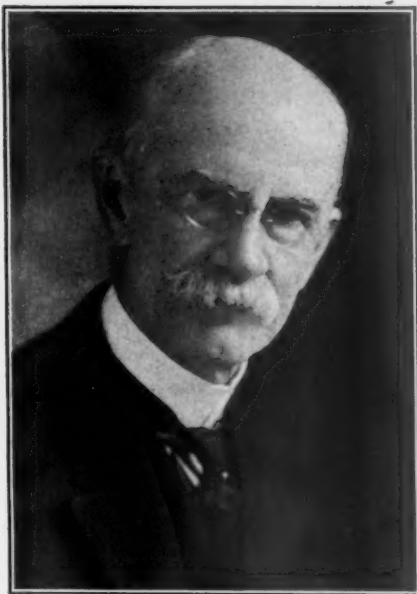
THE MINING CONGRESS JOURNAL

SEPTEMBER, 1919

VOL. V

SAFETY-EFFICIENCY-CONSERVATION

No. 9



SENATOR THOMAS

Whose especially pertinent remarks on industrial matters
appear in this issue.

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SEPTEMBER

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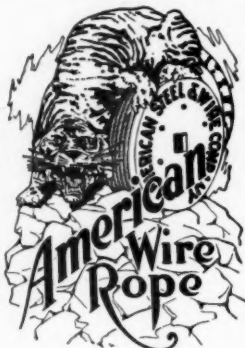
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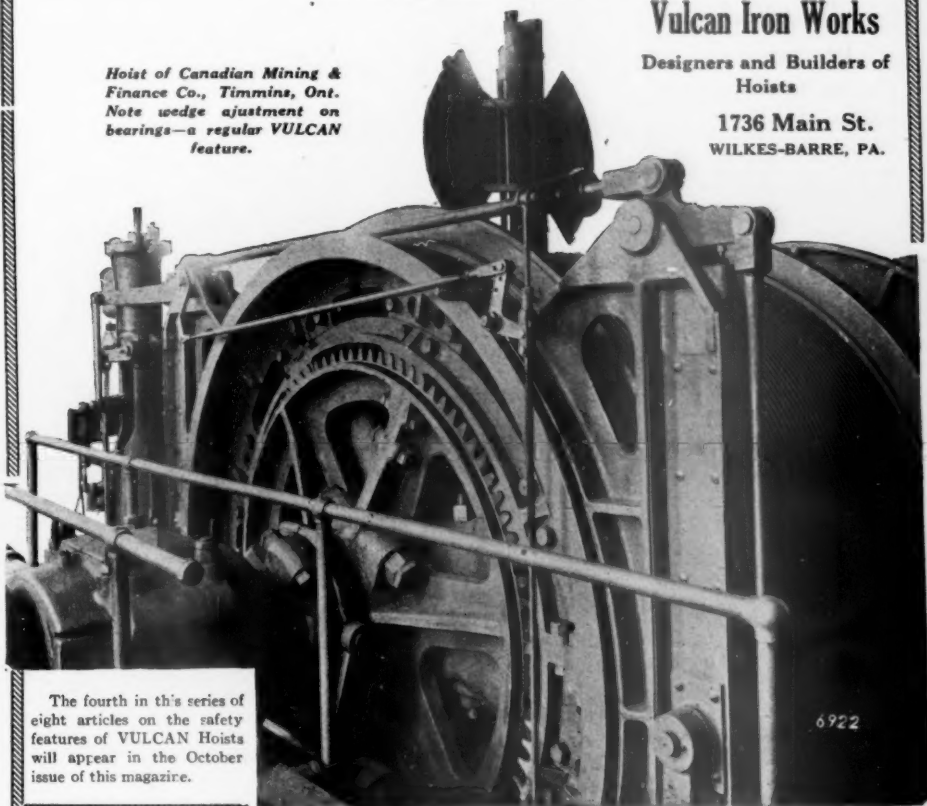
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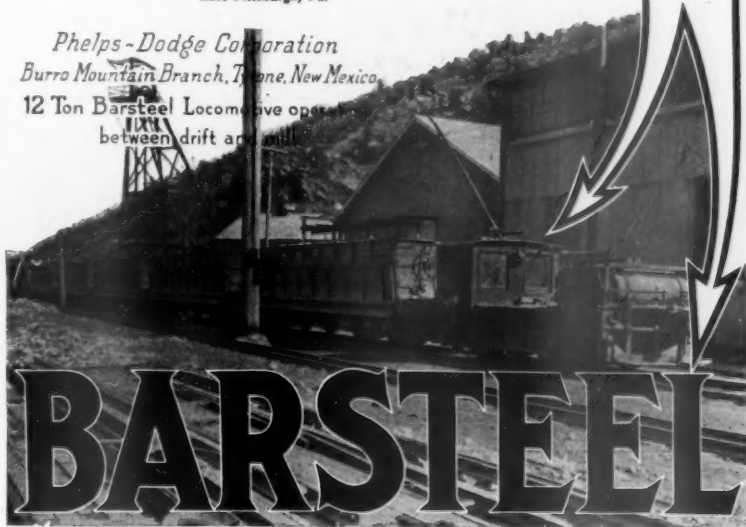
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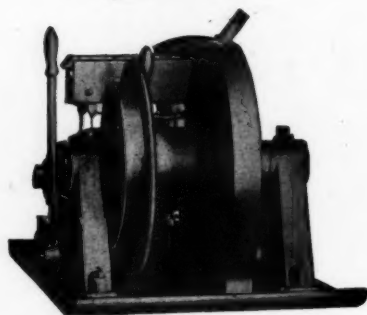
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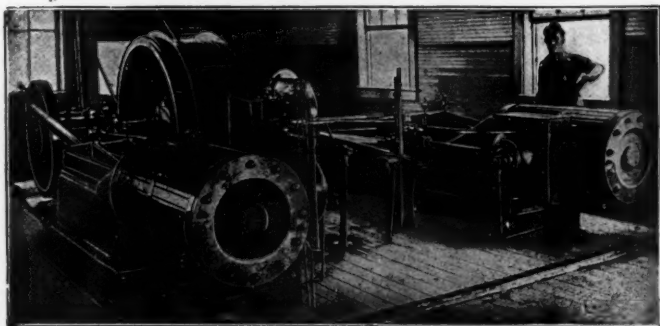
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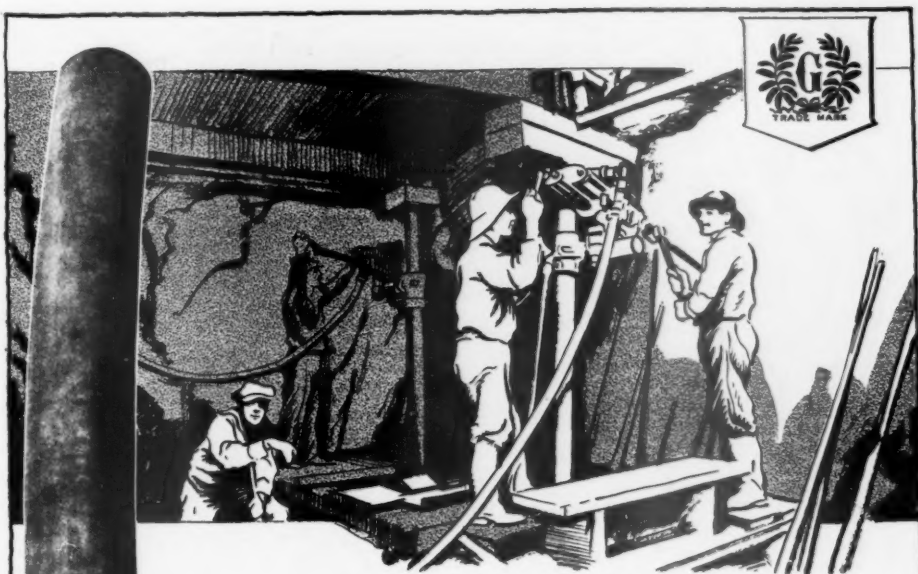
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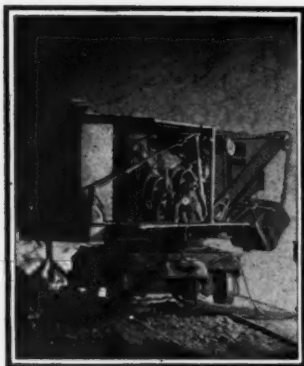
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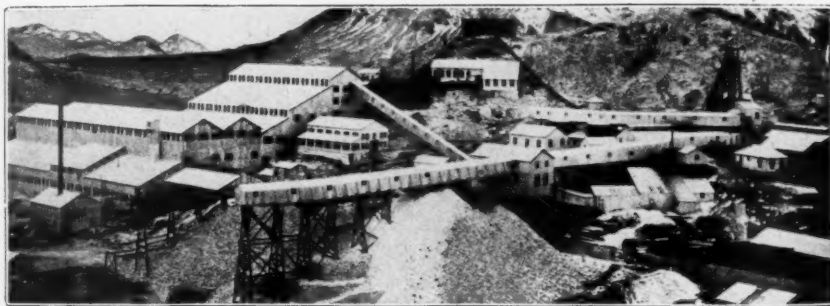
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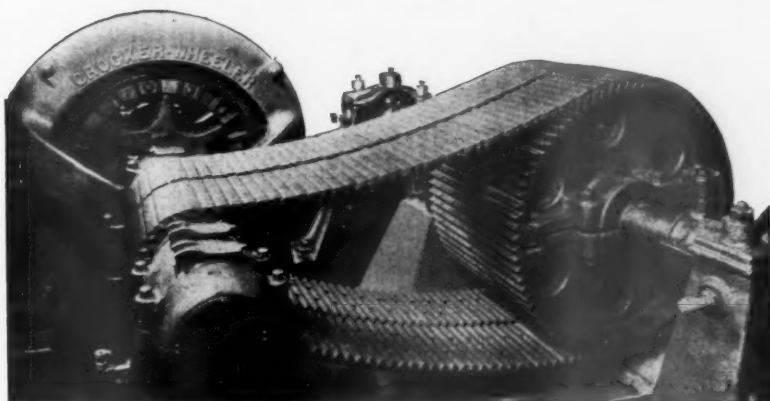
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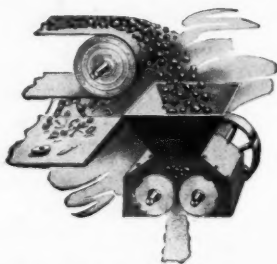
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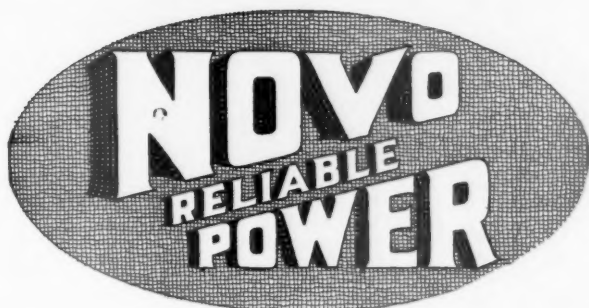
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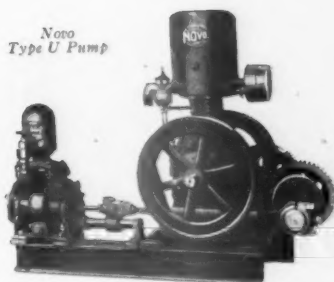
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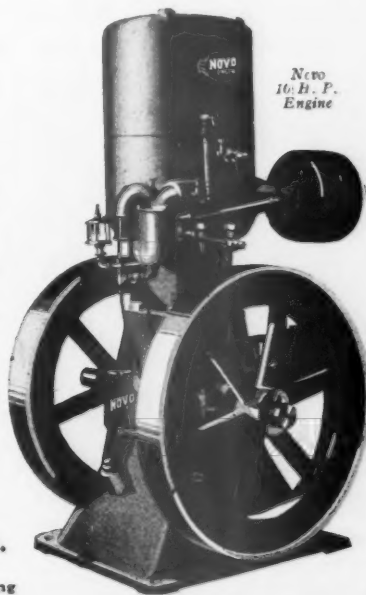
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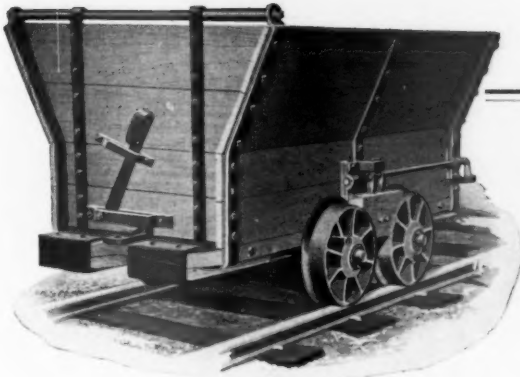
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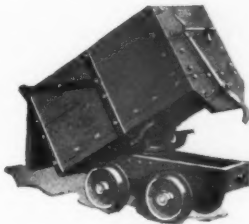
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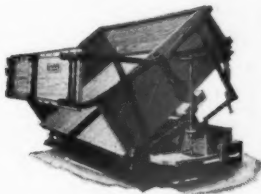
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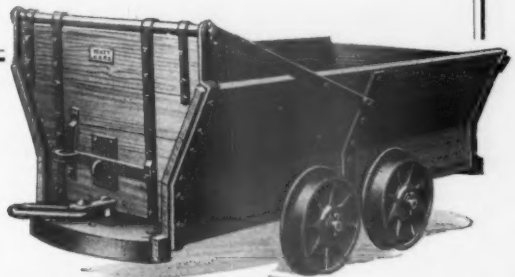
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If need be, he will go right to your field of operation without charge or obligation.

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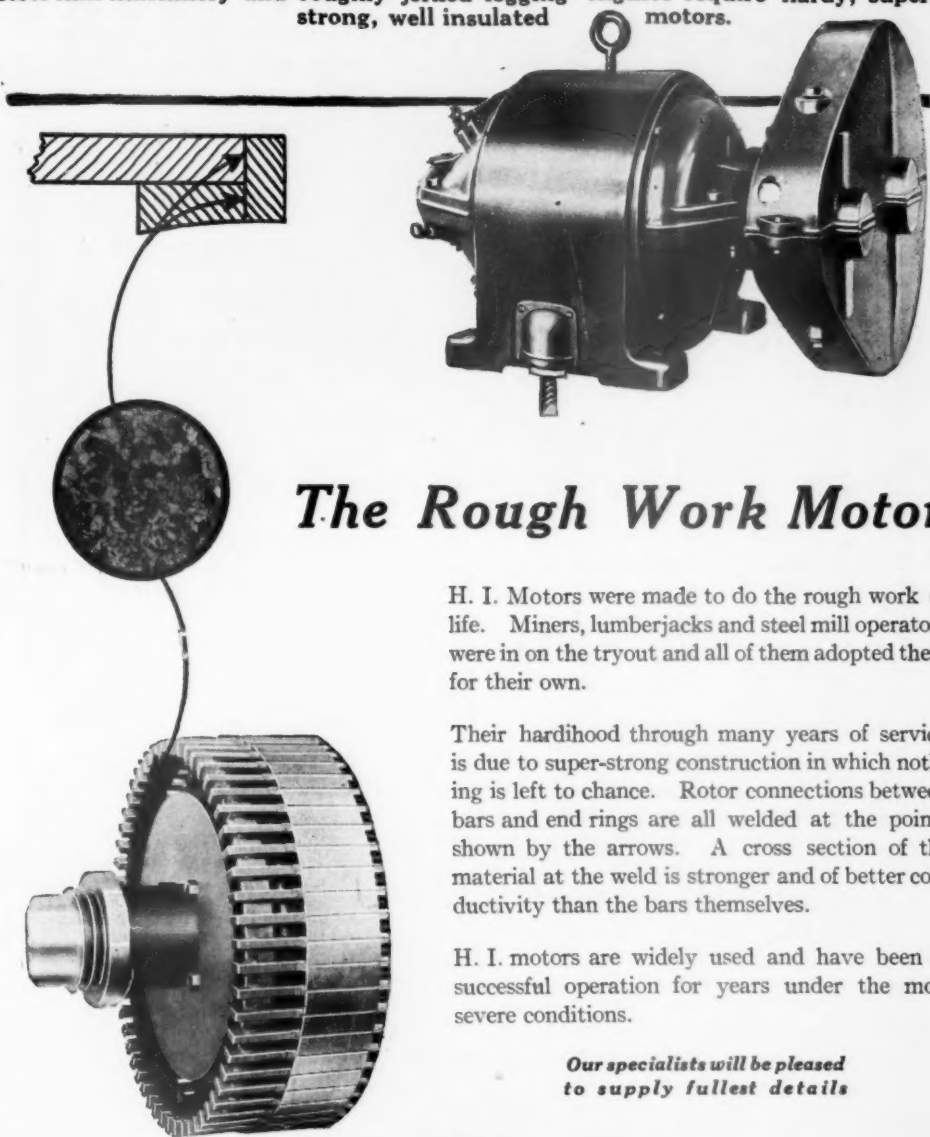
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The Rough Work Motor

H. I. Motors were made to do the rough work of life. Miners, lumberjacks and steel mill operators were in on the tryout and all of them adopted them for their own.

Their hardihood through many years of service is due to super-strong construction in which nothing is left to chance. Rotor connections between bars and end rings are all welded at the points shown by the arrows. A cross section of the material at the weld is stronger and of better conductivity than the bars themselves.

H. I. motors are widely used and have been in successful operation for years under the most severe conditions.

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General  **Electric**
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More than ever the Mill determines the profit

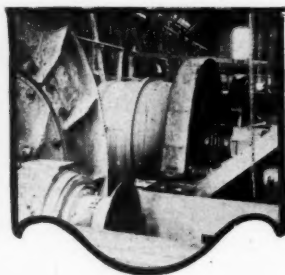
With the rapid development of the mining industry, ore-bodies of lower and lower grade become dividend-paying properties. Old tailings-piles can profitably be re-worked.

It's all a matter of treatment methods.

Reductions in the cost of milling turn one-time waste into pay-dirt. More than ever the mill equipment determines the profit.

The possibilities of the Wilfley Table, the Marcy Mill and other Massco milling appliances warrant careful investigation.

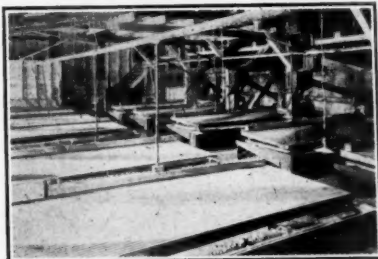
Massco equipment has been making interesting changes in cost sheets.



The past few years have seen important advances in the design of mill equipment.

Many improvements have been added to the Wilfley Concentrating Table—increasing its already high metallurgical and mechanical efficiency. One of the newest features of the Wilfley is a fully enclosed, self-oiling head motion of extreme simplicity, great strength, and designed to impart a highly differential movement to the deck. Wilfley Tables may now be obtained for concrete foundations.

The Wilfley Table has more than kept pace with the requirements of the times—it is a step ahead.



Have you full facts?

In 1915 the Marcy Ball Mill was introduced into commercial service. Its early results were revolutionary, and it has since consistently given capacity that was thought impossible and costs far below the rock bottom figures set for other types of equipment.

The largest capacity ball mill plant in the world uses Marcy Mills and Marcy Mills are now grinding over 60,000 tons a day in approximately 200 plants. If you haven't the Marcy No. 42 Booklet, you will certainly appreciate a copy. Just ask our nearest office.

Investigate the Scobey Tailings Sampler, Pierce Amalgamator, Perfection Oil and Acid Feeder.

Massco service backs them all

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Goodman Scraper Loader



The Scraper, Chute, Sheaves and Electric Winding Engine

The Goodman Scraper Loader serves a panel of four or five rooms until they are driven up and pillars drawn back.

It avoids necessity for laying track, taking top, or placing cars in room.

It is valuable in low coal, in pitching seams, in longwall work, and in room-and-pillar mines working long faces.

Winding engine, car loading chutes and prop sheaves on the entry remain in fixed position; the scraper is shifted from room to room with the work.

Loading costs per ton are materially reduced when account is taken not only of the labor differences, but also of the savings due to elimination of track laying, top or bottom taking, car handling, etc., in the rooms.

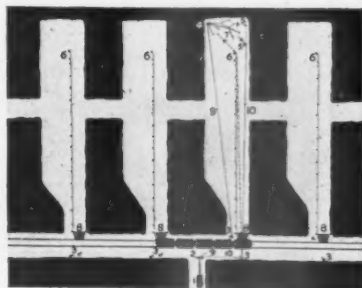


Where Bottom Is Taken on the Entry



Where Bottom Is Not Taken on the Entry

1. Tandem drum electric winding engine.
2. Two pairs of center sheaves in a complete unit, attached to two props.
3. Room sheaves on brackets attached to props.
4. Tail rope face sheave.



Serving a Panel of Four Rooms

5. Two lead rope face sheaves.
6. Guide channel, with rollers.
7. Scraper.
8. Car loading chute.
9. Tail rope.
10. Lead rope.

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AURORA, ILLINOIS

THE MINING CONGRESS JOURNAL

Official Organ of the American Mining Congress

WE WONDER

We Wonder if—

President Wilson really thought he could pass the railroad wage demand over to Congress without anybody getting next to the fact that somebody was trying to pass something?

the 5,500,000 would be absolutely satisfied if they did manage to elect an entirely new Congress?

two per cent, backed by 5 per cent, is a majority of votes in a nation of 100 per cent Americans?

Mr. Jewell knew that his "tie 'em up" interview was loaded?

the fellow who looked down the loaded gun barrel will look down the same barrel with the other eye?

A TARIFF POLICY

It will perhaps not be amiss to again state the position of the American Mining Congress as it relates to a protective tariff duty upon minerals.

The American Mining Congress is not a partisan organization. It is made up of members of both political parties. A high protective tariff is a republican principle, and a tariff for revenue only is a democratic principle.

The American Mining Congress is not an advocate of the principle of protective tariff. But it does insist that, if the principle of protection is to apply to every other line of business, the mining

industry should be granted equal protection. If the miner must buy his labor, his machinery, and his supplies in a protected market, he must also have a protected market in which to sell his products.

It therefore becomes the duty of this organization to see that the Congress of the United States is furnished with all available information concerning the resources and the cost of production of our home product as compared with the production in other countries. The Mining Congress would not knowingly take any step which would estrange any of its members who have allied themselves with the party which stands against the principle of a protective tariff, but so long as a protection policy is to prevail it insists that the mining industry shall have its share.

RADICAL CONSERVATISM

Labor conditions of the world have been undergoing a very radical change during recent years. There has been a great moderation of the views of employers toward organized labor, and upon the other hand the more intelligent members of organized labor are giving more recognition to the rights of capital. Employers who have been developing greater respect for the American Federation of Labor have been rudely shocked by the radical position taken by the Federation as applied to the jurisdiction of our courts of justice.

In a recent communication Mr. Taft uses the following language:

The business men of this country cannot be told too often that the proper course for them to pursue, and a conserving, patriotic course, is in friendship for the labor unions under the leadership of the A. F. of L. Failure to recognize the power of conservative, patriotic labor unionism and to express sympathy with it and a willingness to classify its leaders as associates with the I. W. W.-ism, extreme socialism and Bolshevism, weakens the power of those leaders with their fellows and tends to throw the whole labor movement under the control of the lawless extremists.

Shortly after the writing of this article by Mr. Taft, the American Federation of Labor met in convention at Atlantic City, from which the following doctrine emanated:

The power of our courts to declare legislation enacted unconstitutional and void is a most flagrant usurpation of power and authority and is a repudiation and denial of the principle of self-government recognized now as a world doctrine. The continued exercise of this unwarranted power is a blasphemy on the rights and claims of free men of America.

This is in effect a declaration that the Constitution of the United States shall be ignored and that legislative bodies shall be permitted without constitutional restriction to put into effect any law which popular demand or selfish motive might dictate. It demands the taking of a big, long step toward mob rule. Even though mob action has sometimes been both effective and just, it does not follow that courts should be abolished. The framers of the Constitution of the United States very wisely provided safeguards against hasty conclusions affecting the liberty of the individual, and gave the power to change that Constitution by well-defined processes requiring so much time as to prevent that hasty action which most frequently leads to injustice. Any organized movement which undertakes to ignore that Constitution, and to say that the public sentiment of the particular day shall be the controlling factor in public affairs, is reaching away from democratic government and groping blindly toward the day of mob rule, from which neither justice nor mercy can be expected.

LOW COMEDY IN HIGH PLACES

We all felt a pang of regret at the passing of George H. Primrose. We felt the last of the minstrels was gone, but we may take heart. We are to be further amused—Claude Kitchin is still with us.

The bill for a tariff on tungsten came before the House the afternoon of August 19, at which time Mr. Kitchin put on an exceedingly interesting entertainment. Having neither arguments nor anything on which to base arguments, he took refuge in supposed humor, and, considering that he had neither facts nor information on his side, did pretty well. If George Cohan would only teach him a few steps of fancy dancing the illusion of a minstrel show would be complete.

As an entertainment it was amusing, especially for his side of the House, but it is doubtful if it is one that either the country or Mr. Kitchin's own party can afford. The tariff to Mr. Kitchin is not an economic question, but a question of whose interests are involved. When some farmers in North Carolina began experimenting in tea culture, was it not Mr. Kitchin who suggested to the Ways and Means Committee that tea be immediately put under a high protective tariff?

As a tariff expert and metallurgist, Mr. Kitchin showed himself to be one of the most intelligent cotton farmers in North Carolina.

LABOR AND PUBLIC CONFIDENCE

"There are sixty-five strikes on in this city today," said a prominent St. Louis business man to the writer a few days ago. "Of course," he continued, "all of them are unimportant in a way, but each has a connection with some line of industrial movement in the city and state. Beyond our city limits lie the coal fields with the so-called unauthorized strike tying up production, and across the river an otherwise prosperous city, East St. Louis, is suffering from a tramway strike. Collectively, the situation is cost-

ing industry its normal profits, labor its wages, and the market much-needed production, but the general public, which is as usual the innocent bystander, is getting weary of being the one to pay the bill."

National labor leaders decry "radicalism" and repudiate unauthorized strikes. But the strikes occur—in St. Louis, in Boston, in New York, in Chicago, in every other city, with uncanny regularity and without regard to public or private interest. Contracts and understandings are shoved aside with the same easy manner assumed by Germany when she repudiated international agreements in violating Belgium. Industry is harried and uncertain economic conditions are created. Nobody is to blame. Everybody is to blame. The "little" strikes mean nothing. Collectively, however, they mean much.

A prominent writer on a national labor journal said to the writer not long ago: "There will come a time when mine operators will be glad to deal with the Federation. It will be better business for them to have *something to tie to for stabilization of labor conditions.*"

We have said that "little" strikes are making for uncertain economic conditions. Also, they slow down production.

What the United States needs today more than any other one thing is not higher wages, not less hours for labor, not "rights for laboring men," but just plain, honest efficiency in production. Under-production, under the law of supply and demand, makes for rising prices. High costs in production make for advancing retail prices. Of course there are other things, and the writer agrees that dishonest profits—for there is such a thing—have a part in the scheme of price raising, *but 100 per cent production* will soon bring things to a level and other evils will be erased through natural economic laws.

Every strike, small or large, local or national, authorized or unauthorized, serves to block business just in proportion to the associated industries dependent upon the workers. It robs the worker of just so much money which he could earn honestly and destroys just

a bit more confidence which the employer probably had in organized labor. So far as the public is concerned, it loses not alone confidence, but respect, in its attitude toward labor. Therefore what is happening in St. Louis, in Chicago, and in every other city tends to destroy the national fellowship which should exist if we are to have a united people.

Labor cannot really afford to lose public confidence. Samuel Gompers, master-mind of organized labor and dictator of the Government's labor policy, knows this better than any other living man, and he endeavors to control and hold the radicals in leash, but his lieutenants are often repudiated—seemingly—and strikes occur.

It is not impossible that some "radical" friends of the program of industrial renovation are watching with keen pleasure the sporadic little strikes which tend to harass business until in desperation it will seek some organized method of clarifying the industrial air.

Thus the "sixty-five little strikes" here and there seem to have an uncanny connection with the general scheme of "testing the public temper" to see whether it is a good and patient public and how long it will stay hitched. One might wish to believe that the American Federation of Labor is doing its best to prevent local issues arising to annoy employers, but one is forced to admit that it does not enter open and serious protest to these conditions, and while strikers are sometimes "ordered" back to their work it is always and unequivocally upon promises that there will be an "early and satisfactory settlement" of the points in dispute.

TARIFF ON WAR MINERALS

A year ago the whole mineral industry of this country was engaged in a mad scramble to produce enough war minerals to supply even our most urgent needs. It has been generally recognized that the nation ought not to be caught in such an emergency again.

Tariff protection on raw materials in the form of natural resources, and particularly natural resources of a diminish-

ing character, is emphatically a new problem. The necessity for such tariffs was shown to the country in the bald facts of our utter lack of development which stood out so vividly in the white light of the war.

Tariff on war minerals has become necessary and advisable for two reasons: First and most important, a national security demands that we must, in time of peace, build up the industries which are to sustain us in time of emergency. Second, the economic relation of mining to other industries makes it necessary that the miner buy his equipment, his supplies and his labor in a protected market. If he has to do this, he must sell his product in a protected market, and while ore, as it comes from the mine, is the raw material of other industries, it is the miners' finished product, and on this finished product, where necessary, he must have tariff protection which will place his operations on a fair competition basis.

On another page of this issue is a table showing the status of the various bills for mineral tariffs which have been introduced into both houses of Congress during the present session.

THE PLUMB PLAN

The endorsement of the Plumb plan for the nationalization of the railroads and the inferential approval of the nationalization of all industries based upon public consent and natural resources will not tend to strengthen the A. F. of L. with many parties who have hoped to co-operate with it as the conservative element in the labor world.

Transportation is the basis and life blood of our civilization. It would seem very dangerous to put the transportation systems of the country under the absolute control of organized labor, one branch of which has declared itself willing to cut off the supply of food to the cities in order to force its demands, as was threatened in order to induce Congress to pass the Adamson law.

If the conservative element of labor is to demand the right to control the very existence of the people, if it is to de-

mand that the Constitution is to be set at naught and that the whim of the populace shall be the only rule of action and the only protection to the rights of the individual, it would seem that the conservative element of labor is losing its bearings.

THE DANGER OF INCREASING PROFITS

President Wilson's notice to the railroad shopmen that every increase of wages is a step toward higher prices, and his request for delay until the efforts to reduce the cost of living could make the present wage scale adequate, are to be commended. It is hoped that the shopmen will be willing to accept this suggestion.

It is unfortunate that other railroad employes who have, in the recent past, received substantial advances in their wages, are also intending to demand higher wages. In the meantime, street car companies are quite generally demanding an increase in street car fares, and business generally is adding to the difficulties by insisting upon profits based on percentages of cost.

The MINING CONGRESS JOURNAL has frequently expressed the hope that the readjustment of business conditions in this country to price levels approximating the pre-war period might be accomplished through intelligent foresight rather than through the disastrous logic of an industrial panic.

Business men should do business with little or no profit until conditions may be readjusted. This should particularly apply to public service corporations. When a 5-cent fare created a generous profit, street car companies filled the air with protests, because of every effort of the public looking to a lower rate.

This is a time when all business organizations should stand as a unit against advancing prices. Wages cannot be reduced without suffering and want, except as the price of life necessities is reduced. Wages constitute approximately 70 per cent of the cost of production. The problem of wages and living cost is an endless chain, well illuminated by the statement of the youth who explained

his dissatisfaction with life by stating that he had to "work, work, work, to get money to buy clothes to work in, to get more money to buy more clothes to work in some more."

What is required is an increase in production: with plenty of goods in the market, prices will quickly recede. With a recession of the cost of living, wages can be lowered, or at least present wages will be adequate, but while this increase in production is being made we urge upon business generally to take its loss, hold its organization, and rely upon future conditions to make the profit which, if taken now, will but accentuate the difficulties of the readjustment problems.

RULE OR RUIN.

Roughly speaking, 90 per cent of the population of the United States does not belong to labor unions, is not employed in vocational work which demands or allows unionizing and is not interested in the union movement, and yet so strong is the belief of the American Federation of Labor in its dominating power that Acting President Jewell of the railroad brotherhoods threatened openly, in the capital of the United States, to "tie the railroads up so hard that they will never run again" unless Congress swallowed the whole Federation program, including, of course, the increase of wages asked by the two million railroad employes and the adoption of the "Plumb Plan" by which labor would absolutely control the transportation of the nation. And Mr. Jewell showed that he thought he knew whereof he spoke, for within twenty-four hours one of his associates, no less a person than Frank Morrison, astute and clever secretary of the American Federation of Labor, close associate of Samuel Gompers, told the Congressional committee that while the Federation is not a political party, its fixed policy is to "elect our friends and defeat our enemies." Mr. Morrison then called attention to the fact that there are about 4,700,000 members of the Federation now enrolled—an increase of 1,000,000 during the past year.

Thus, 2 per cent of the population threatens that the business of the nation will be paralyzed unless its expressed wishes are granted, and it is backed by the veiled threat that an added 3 per cent will join the brotherhoods in an effort to send members of Congress who refuse to bow the knee in submission back to their home towns to wear the honorable decoration of Private Citizen.

The leaders who threatened to tie up the arteries of the nation unless the labor program was swallowed by Congress openly boasted that they dared to make their assertion because they were organized. In England, where the government has granted part of the program demanded by the laborites, the nation was in such dire distress for fuel that it appeared to be the only way of preserving peace and securing fuel for a war-torn nation. Business in England was poorly organized, and, while there were academic defenses made of the rights of industry, the threat of fireless furnaces, of cold homes, of general commercial stagnation, forced a government, unsupported by efficiently organized business, to capitulate to the extent of agreeing to purchase the leased coal mines of England, give the workers a share in management and establish a fund for betterment of living and working conditions.

And the writer reflects upon the history of the past two years: The Adamson law (or a nation-wide strike); the sympathetic and unnatural forcing of wage scales beyond the wildest dreams of a labor "radical" under stress of necessary war production; the demand for a billion and a quarter more wages from the already overloaded railroads; the threatened enforcement of that demand through a pending strike; the demand for the operation of the railroads under labor control; the expressed and openly understood plan of the American Federation of Labor for the nationalization not alone of railroads but of telephone and telegraph lines; the pronouncement of the United Mine Workers for nationalization of coal mines and a six-hour day—a program endorsed by the Federation—and he finds food for reflection.

He wonders, as he watches the attempted forcing of a national strike in the steel industry for the sole purpose of securing recognition of the union, at a time when every American citizen should be pulling in harness, just how the man who offered his life to his country and fought the Germans and vermin for eighteen months at one dollar per day, while the "home army" fought out the hour and wage problem, looks at it.

It might be interesting to know.

COMMERCIAL HELIUM

To the Bureau of Mines of the United States belongs the credit for having developed the most wonderful chemical composition, resulting from war investigation—wonderful, because the latest in non-explosive gases for use in lighter-than-air craft and acceptable to the world because it is a constructive rather than a destructive substance.

When Janssen made the discovery that among the gases escaping from the sun was a distinct and peculiar composition at that time unknown to chemistry, he little dreamed that he had started a trend of thought that would eventually revolutionize air transportation. For lack of a better name the chemical, or gas, was called "helium," from the Greek word "Helios," meaning "sun."

Janssen's investigations were followed up by Dr. W. F. Hillebrand, of the United States Geological Survey, and later by Sir Wm. Ramsey, a noted British chemist. These investigations resulted in the discovery that certain of the earth's substances contained a gas which came to be known as "helium." No progress, however, was made in the development of this gas, except to satisfy the curiosity of the chemists.

It fell to the lot of Director Manning, of the Bureau of Mines, to direct the attention of Dr. F. G. Cottrell, now assistant director of the bureau, to a new process for air separation that embodied novel features, and which it was thought might, if closely followed up, result in the commercial production of oxygen for use in furnaces.

The process had been discovered by a

graduate of the Massachusetts Institute of Technology, Fred E. Norton, an engineer of wide experience, who in connection with E. A. U. Jefferies had patented and then controlled what was known as the Jefferies-Norton process.

Sir Wm. Ramsey was at the time working on the helium problem for Great Britain and had found that certain coal gases contained a very small percentage of helium. He had not, however, succeeded in establishing any method by which helium could be produced for practical use.

Dr. H. P. Cady had, many years before, found that the natural gas of Kansas contained some strange composition, first noted by Janssen in the sun, and had followed up his discoveries by establishing the fact that the natural gases of Kansas might eventually be made to produce a quantity of this rare substance.

Dr. R. B. Moore, of the Bureau of Mines, who had been collaborating with Sir Wm. Ramsey in the British investigations, chanced to attend a meeting of the American Chemical Society in Kansas City in 1917, when the work of Dr. Cady of Kansas was publicly discussed by Dr. C. W. Seibel. Dr. C. L. Parsons, the chief chemist of the Bureau of Mines, was also present, and within a few days, as a result of the various lines of discovery and discussion of the same, the director of the Bureau of Mines had charged G. A. Burrell, in charge of the bureau's work, with the important duty of analyzing the natural gas fields of the United States, and had equipped Colonel Burrell with sufficient force to complete this work in the least possible time.

It happened that Mr. Burrell was aware that at Petrolia, Tex., there had been found a gas field containing a considerable quantity of helium. Then began the race between the British chemical warfare department in the Canadian fields and the American Bureau of Mines with the Kansas fields for the first establishment of a commercial helium, with quick and inexpensive production.

The result has been a development

which will revolutionize and make safe balloon, "blimp" and Zeppelin transportation.

Helium is a non-explosive gas, which can be used pure or in composition with hydrogen, has great lifting power, and is the nearest approximation to an ideal gas. The buoyancy, the chemical inertness and non-explosive features of this wonderful substance, which has heretofore been wasted by all the world, makes this work of the Bureau of Mines of prime importance to aeronautics, and, through aeronautics, of importance to all industry as well as to warfare, and is only one of the long list of accomplishments to be credited to the Bureau of Mines during the past few years of its existence.

It is now shown that helium, which at first was looked upon as a scientific curiosity and which cost from \$1,700 to \$2,000 per cubic foot, can be produced upon a commercial basis in large quantities, and it only remains for the Congress of the United States to place at the disposal of the Secretary of the Interior appropriations sufficiently liberal for the building of necessary plants in order to insure the supremacy of the United States in lighter-than-air communication.

A "CLOSE-UP" VIEW

The western tour of Dr. Van H. Manning, Director of the Bureau of Mines, which has carried the director into the midst of many of the most important mining and petroleum sections of the western states, will no doubt result in a more comprehensive policy to be hereafter maintained in certain divisions of the bureau's work.

Dr. Manning believes in a practical and constructive policy in his department, and no bureau of the Department of the Interior has wider scope for its constructive work than has that entrusted to his care.

The Bureau of Mines has many times returned to the nation the expense of its maintenance, and has to a large extent revolutionized many phases of production and the development of by-

products. Surrounded by a most excellent and thoroughly loyal corps of highly trained men, the Director of the Bureau of Mines has succeeded in building up an institution second to none in the world. The rapidity of the growth of the bureau has, however, made necessary a very close personal application of the director's time. And very naturally, while a great work has been accomplished, the director's contact with the problems confronting the mining industry has of necessity been through his field associates rather than of a personal nature.

The determination of Director Manning to see for himself and to make a first-hand study of these conditions was, we believe, a most wise and profitable one. He has been able to hear and consider the expressions of the mining operators, surrounded by local atmosphere. He has been able to review the oil fields and know the local problems and compare them with the national.

And of more value than all of this, from the standpoint of the west, has been the opportunity for the establishment of personal relations between the director and hundreds of operators in the west who have been prone at times to consider that the Bureau of Mines was "an organization of technicians and scientists"—and so far removed from a sympathetic contact with the industry itself that it had little right to the friendship of the rank and file of mining operators, large or small.

Those who are closely in touch with Dr. Manning and the Bureau of Mines are well pleased that the director has taken the time to secure a "close-up" view of the western situation. THE MINING CONGRESS JOURNAL suggests that an annual or semi-annual tour of the mining districts of the country, if personally made by the Director of Mines in a spirit of investigation and co-operation, would add immensely to the already splendid accomplishments of that bureau.

TUNGSTEN WINS

Tungsten won the first victory for protection on war minerals on August 21,

when the Timberlake tungsten bill, providing for \$10 per unit of tungsten content in raw ore and \$1 per pound of metallic content in products and alloys, passed the House with a vote of 173 for the bill and 121 against it.

Introduced and fostered by the Hon. Charles B. Timberlake of Colorado, this bill marks a new era for the producers of war minerals.

This bill was bitterly fought on the floor of the House by its opponents, no less than six different amendments being proposed, the adoption of any one of which would have nullified the entire effect of the bill. One whole day was consumed in defeating these various amendments.

While the bill has yet to pass the Senate and be signed by the President, its passage in the House is a most signal victory for all mining interests seeking such protection, where it blazes the trail for future legislation of this kind and establishes a new precedent for protective tariff.

It is regrettable, however, that the opponents of this bill drew party lines so strictly in endeavoring to make a political issue of what is such a serious national problem. It is safe to say that not one man who opposed this bill would have opposed any measure to advance tungsten production during time of war. Yet is it not as culpable to oppose this legislation which will protect this industry in time of peace, so that it will be in readiness in case of national emergency? As a measure for true preparedness, such bills as this should have the support of every patriotic citizen.

LABOR MATHEMATICS

It begins to look like this:

— hours + more \$\$ — more hours
+ more \$\$ — more hours + more \$\$
= 0

SENATOR THOMAS DISCUSSES UNIONIZATION OF POLICE

Speaking in the Senate, September 5, Senator Thomas said:

"The public has been informed from day to day of the action of the authorities toward the organization of the police force of the

City of Washington and its proposed affiliation with the American Federation of Labor. The Commissioners of the District of Columbia, in the necessary and very proper exercise of their functions as the governing body of the people here, have vigorously objected to this organization and have forbidden its affiliation with the American Federation of Labor. They have recognized the menace of such a situation if it should develop into an actuality, and have taken steps to prevent it which should receive the commendation of every right-thinking man and woman in the country. Some of the policemen are said to have defied the orders of their superiors and have announced their intention of perfecting their plans and accomplishing their purposes. They are receiving the active assistance and support of the representatives of the American Federation of Labor, including Mr. Gompers, the president of that great organization.

"On yesterday Mr. Gompers appeared before the Commissioners in behalf of the police union and used his great influence in the effort to overcome the attitude of the Commissioners and to secure their consent to the proposed confederation. I shall not occupy the time of the Senate in reading the somewhat lengthy account of his efforts, but content myself with calling attention to the fact that Mr. Gompers protested against this opposition as 'an activity which indicates a misconception of the American Federation of Labor, which casts a stigma upon it, and declared flatly that America was not prepared to brook autocratic action by any official.'

"My contention is, and I do not believe it can be refuted, that no such alternative presents itself; that these employees need not and should not be permitted to assume obligations, membership, and commitments which essentially injure or impair their efficiency as guardians of the public peace. No man, no matter however devout or far-reaching his belief in the principle of unionism, can defend its application to conditions like these.

"I trust, therefore, that the Congress of the United States will stand squarely behind the District Commissioners and by their power over the national purse bring confusion to this last and most impious attempt at government by injunction."

Magnesite Bill Reported Favorably

The bill providing duties for magnesite and its manufactures was reported favorably by the Ways and Means Committee as this issue was going to press.

An Eight-Hour Day

The French Chamber of Deputies, which recently rejected a bill proposing an eight-hour day in the coal mines of France, has now adopted the eight-hour day, and explains that its previous rejection was the "result of a misunderstanding." The strike in the French mines has therefore been called off.

THE AMERICAN MINING CONGRESS ST. LOUIS INDUSTRIAL CONFERENCE

The American Mining Congress, representing the broad interests of the basic industry of mining, has determined to take an active part in the adjustment of the general business program of America. The Congress has been one of the most conservative factors in America since war was declared, and mining, with its affiliated industries, has profited in great measure by the effective team-work of this organization throughout the country and especially in the National Capital, where both administrative and legislative tendencies to disrupt business have, at times, been most dangerous.

Since war ceased, and the need for complete readjustment of industrial relations and business methods has become apparent, the officials of The Mining Congress have been carefully analyzing these problems with the idea of eventually presenting to Congress a workable and fair program which would have the endorsement of the American people.

To consider this program, The American Mining Congress has called a convention of mining men, labor and financial leaders and economists to be held in St. Louis during the week commencing November 17. The Planters Hotel has been secured for headquarters, convention sessions and for an interesting educational exposition of the history of mines and mining development, which is to be installed by the U. S. Bureau of Mines by courtesy of the Hon. Franklin K. Lane, Secretary of the Interior.

The business men of St. Louis, realizing the importance of this convention, have begun elaborate preparations for accommodating the delegates. A committee has been appointed, composed of some of Missouri's leading business men, The Mining Congress, in order to facilitate the organization of this convention, has opened a business office at the Planters Hotel.

The official call has been supplemented by cordial invitation from Governor Gardner of Missouri, Mayor Kiel of St. Louis, and the combined industrial bodies of Missouri and St. Louis.

The complex economic problems now confronting the mining industry include many of the "every-day" questions arising in mine management, and the transportation and marketing of mine products. Not only will these matters be given attention, but the great vital issues now more or less in their initial stage of development will be fully and frankly discussed from every angle in order to develop a solution of the problem upon which the country may depend for its future industrial security and prosperity.

TARIFF BILLS FACE DELAY ON ACCOUNT OF SENATE APATHY

Tariff legislation is being delayed by the apathy of the Senate. While the tungsten bill is the only one of the emergency tariff measures which is of specific interest to the mining industry, which has passed the House it may be said that the House would have worked faster had there been any prospect of securing prompt attention to such bills on the Senate side.

At this writing the zinc bill is scheduled to come up next in the House.

There are no promises being made on the Senate side as to when the tariff bills will be taken up. It has been stated defi-

nately that there will be hearings and that they will consume considerable time.

Distributors of Coal

The U. S. Fuel Administration has received requests for a list of the distributors of coal and coke to whom licenses have been issued. The demand for such list, however, has not been sufficient to warrant the printing of a list of these licensees for publication by the Fuel Administration.

Anyone desiring this list will be afforded an opportunity to make copies thereof subject to such restrictions as may be necessary to prevent interference with the use of the list for purposes connected with the official business of the Administration.

PITTSBURGH RESEARCH LABORATORIES TO BE DEDICATED FORMALLY SEPT. 29

The new laboratories of the Interior Department's Bureau of Mines at Pittsburgh, costing more than a million dollars, are to be dedicated on September 29, 30 and October 1 with appropriate ceremonies, in which the mining and metallurgical industries of the country are to take part. The program for the three days has been arranged by the Bureau of Mines in cooperation with the Pittsburgh Chamber of Commerce.

This great research establishment is a monument to the American Mining Congress in that its activities brought about the creation of the Bureau of Mines. The Pittsburgh station was a part of the original plan as developed by the American Mining Congress.

One of the biggest features of the coming ceremonies will be the Nation-wide First-Aid and Mine-Rescue Contest to be held during the last two days. Already nearly 100 teams from the coal and metal mining companies throughout the country have entered the lists and more are expected by the time the entries close.

On October 1 there will be a holiday for the miners of the Pittsburgh district, and thousands will attend this national meet and witness the awarding of the prizes to the winners.

In addition to the usual prizes for these contests, the Joseph A. Holmes Safety Association, an organization created in 1916 in honor of the memory of the first director for the purpose of giving recognition to persons who had performed meritorious and heroic deeds in the saving of human life in the mining and metallurgical industry, or who had developed some safety appliance to further the saving of life in those industries, will make its first awards. Dr. Van H. Manning,

president of the association, will announce the list of recipients of diplomas and medals and recite the deeds for which they are presented. The Committee on Awards has recommended that twelve gold medals be awarded all for heroic deeds performed by miners in coal and metal mines in efforts to save the lives of other fellow-workmen. In several instances where men lost their lives in endeavoring to save others, the medals will be awarded to their nearest living relative. It is intended that this organization serve the mining industry in the same manner as the Carnegie Hero Commission attempts to serve industry generally.

Speaking of the accident conditions generally in the mining industries and of the outlook, Dr. Van H. Manning, director of the Bureau of Mines, says:

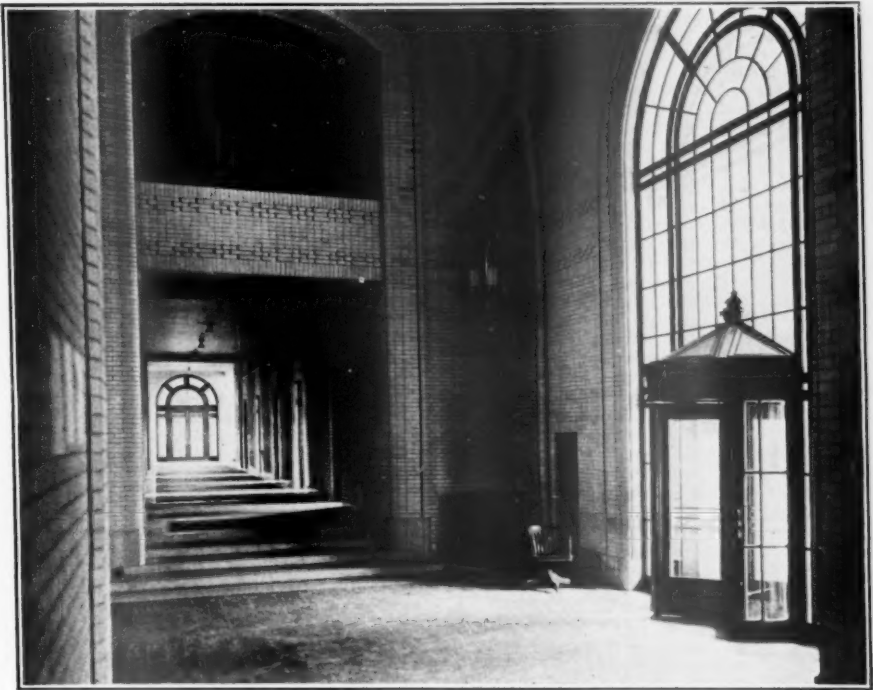
"I am often asked, 'What has the Bureau of Mines accomplished in the saving of human life in the mines?'"

"It is difficult to say that so many miners might not have been killed if it were not for the Bureau of Mines, there are so many varying factors involved. I may say, however, that if you consider the prevailing average death rate in the mines for a period of years before the Federal Government took up this work and compare it with the average fatality rate since the bureau was created, you will find that 5,000 less miners have been killed. In other words, had the old fatality rate been maintained through the last few years, 5,000 more men would have lost their lives.

"I am of the opinion that the statement of 5,000 lives saved is a conservative one, for it must be remembered that the situation was gradually becoming worse in the mines, and



THE NEW MILLION DOLLAR LABORATORIES OF THE U. S. BUREAU OF MINES AT PITTSBURGH



ONE OF THE MAIN CORRIDORS OF THE PITTSBURGH LABORATORY

who knows but what there might not have been 7,000 or 8,000 lives lost. We also have to take into consideration that, thanks to the many improvements in life-saving methods and the greater understandings of the causes of accidents, the tide has definitely turned and that this saving of 5,000 human beings within a few years will be accentuated and increased as the years roll on until we can show several times 5,000 lives saved.

"Whatever statisticians attempt to make out of these figures, however they may endeavor to twist them, it is indeed a glorious record of human progress. Five thousand lives saved! Perhaps 2,000 less widows! At least 3,000 children who still have fathers.

"Take away all the other manifold duties of the Bureau of Mines and this one accomplishment is worthy of all its costs to the Government since its establishment and for years to come. And when I referred to this as an accomplishment, I do not mean that the Bureau of Mines deserves all of the credit. It was, however, the agency that picked up the isolated, sporadic efforts of a few well-meaning men and companies and welded them into a great national movement for greater safety in the mines. It is true it at once gained the cooperation of the miners, the mine operators,

the state mine inspectors and others, and without these the Bureau of Mines would have been almost helpless.

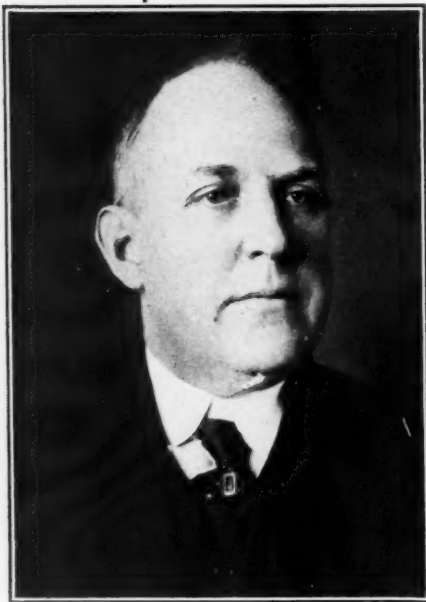
"It was in 1911 that the bureau held under its auspices a great, national first-aid and mine-rescue meet at Pittsburgh, Pa., which was attended by 22,000 miners. The slogan of that meet was 'Safety First,' and that was the time that the slogan, since internationally famous, first became a national battle-cry for this humanitarian movement. I understand that a steel company had used the slogan locally before that, but to all intents and purposes the Bureau of Mines was responsible for its becoming a great world slogan.

"Not only was 'Safety First' immediately adopted by the mining companies, as you will see it posted about hundreds of mines and also on their equipment, but it was also taken up by the railroads and by industrial plants of the country until it became a national byword. Safety organizations appeared everywhere; committees of the men were formed in the mines and shops, and determined campaigns were inaugurated to reduce the number of deaths and injuries in the industries. In some of the big establishments the committees printed little papers for the men, giving the progress of the life-saving work and pointing

out accidents that perhaps could have been avoided. Safety inspectors and committees were chosen, the railroads built up elaborate safety organizations, and divisions vied with each other as to which could produce the cleanest records. There was a spirited rivalry between these committees, and the records of the different establishments began to show results in lives saved and men saved from suffering. In quite a number of mills and factories and railroads there was a reduction in the fatalities of more than 50 per cent. Further improvement was slower, but the original gains were made and added to.

"Just how many thousands of lives were saved may never be known, for there are no statistics that adequately cover industrial accidents, but we do know that the Bureau of Mines and its associated agencies started a movement that not only spread throughout the entire United States but also reached the other countries of the world with an equally good effect. And it all started with the modest mine-safety meet we held in Pittsburgh in 1911.

"Since that time the bureau has gone on its way, improving its methods, interesting the miner in his own safety and that of his fellow-man, doing what it could to point out to the owners of the mines the dangerous places that could be avoided and making recommendations as the result of its experiments looking toward still greater safety.



DORSEY A. LYON

Superintendent of the Pittsburgh Station

"Today the Bureau of Mines maintains in every mining field of the country a mine-rescue car fully equipped with modern life-saving apparatus, that responds to disasters and assists in the rescue work; in the meanwhile, visiting the mines in its district and giving the miners training in both mine-rescue and first aid to the injured. As a result there are several thousand miners throughout the country who are expert in the use of the oxygen mine-rescue apparatus and who are familiar with the most modern methods of life-saving. Besides, more than 50,000 miners understand first-aid-to-the-injured work as well as regular hospital corps. All of these men have been trained by the Bureau of Mines.

"Happily, great mine disasters have been becoming fewer and fewer as the men come to a better understanding of the causes. Nevertheless, they do happen, and one thing that the bureau has preached is that upon such a visitation there shall be a more orderly and systematic method of rescue work, for it has been demonstrated that life can be saved in devious ways. The bureau has endeavored to tell the miners that, in a great catastrophe, it is often better for entombed miners to barricade themselves in, keeping the poisonous gases out of their working place and waiting for relief. In this manner forty-two men entombed in a mine for four days were recently rescued, the men even being able to walk out of the mine.

"We are now hopeful that this coming nation-wide first-aid and mine-rescue week in Pittsburgh will give the safety movement another such impetus as the meet in 1911. If its influence is but one fraction of the former meet, the bureau will be amply repaid for initiating this movement.

"As far as the mining industry is concerned, we are not content to rest on the progress made. There are now more than a million miners in the United States, and each year more than 3,000 are killed in accidents and a quarter of a million injured. Taking the cold, business calculation of the state compensation commissions and eliminating the suffering and sorrow of 3,000 killed each year, the economic loss from these fatalities alone is \$12,000,000 a year, for these commissions are paying an average of \$4,000 for every life lost. This is a terrible toll for one industry to pay each year in providing the coal that furnishes the power of the nation and warms the homes of the people. It is hard for us to realize that, out of every mining camp of 1,000 men, three of them are sure to lose their lives before the next year is out.

"Mining will always be an extra hazardous business; there will always be dangers inherent to the industry that will ever take a death toll and beyond which it will be impossible to reduce the death rate.

"But the question is, 'Have we reached that irreducible minimum?' No, I think not. It is my



An explosion of coal dust at the experimental mine of the U. S. Bureau of Mines at Bruceton, Pa.

belief that we can cut down the present fatality rates fully one-half; that we can save each year 1,500 of the 3,000 killed every twelve months. Isn't such a goal worth striving for? A prize of 1,500 human beings saved to life, happiness and their families each year!

"This may seem like one of those ideals impossible to attain, but so did the saving of 5,000 lives already accomplished through similar efforts. Nevertheless, that is our goal, and today we see more definitely its attainment than the progress already made when we started this work. The causes of these fatal accidents are now much better known than heretofore. Operators and miners are giving much more thought to the dangers of the mines, and the wide-awake among them have installed more modern safety devices. The industry is not now groping in the dark on some of those causes that were more or less mysterious some years ago, such as the dangers from coal dust. Through its experimental mine of the bureau, mining men and miners both have a keener understanding of the dangers of coal dust, and they have also learned how to care for this menace that has cost so many lives.

"In the mining industry at least a human life is much more valuable than ever before, and I believe that can be said of all the industries, especially those of the United States. The recent world holocaust, in which 7,000,000 men made the supreme sacrifice, would seem to belie my statement; nevertheless, it is true as seen in the great advances in safety work, the millions of dollars spent in safety devices, and the humanitarian work of the different state compensation commissions. The day of the ambulance chaser and those ghouls that preyed upon the widow beset with grief over the loss of her husband has happily passed away. The state now steps in and sees that the widow and the orphan are protected, and that alone is worth all the fight that we have endeavored to make. I do not say that the Bureau of Mines is responsible for these state compensations, but I do know that these commissions came after the mining industry started its great human saving drive and that the disclosures of the conditions in mining furnished the states with facts that favored the establishment of these commissions.

"Cut the mine fatalities in half."

The dedication ceremonies promise to bring to Pittsburgh for the three days the most prominent mining and metallurgical men of the nation, not alone interested in the safety-first movement, but also those connected with the allied industries that use the products of the mines.

The Bureau of Mines, in cooperation with the Pittsburgh Chamber of Commerce, has already completed an elaborate program of events, which includes the presence of high government and state government officials, besides the leading men of mining thought in the country. The ceremonies proper open on Monday morning, September 29. The evening before, Sunday, September 28, there will be reception committees at the various leading hotels to receive the guests. On Monday morning the new laboratories at 4800 Forbes street will be open for inspection, and at 10.30 o'clock the dedicatory ceremonies will be held on the lawn in the rear of the laboratories, with Dr. Van H. Manning, director of the bureau, presiding. After invocation by Dr. S. B. McCormick, chancellor of the University of Pittsburgh, there will be an address of welcome by Hon. E. V. Babcock, Mayor of Pittsburgh. Response will be made by the Hon. Franklin K. Lane, Secretary of the Interior, to be followed by addresses by Horace B. Winchell, president of the American Institute of Mining and Electrical Engineers; John L. Lewis, acting president of the United Mine Workers of America, and the Hon. William C. Sproul, Governor of Pennsylvania. The formal ceremony of handing over the keys of the building by Secretary Lane to Director Manning will follow.

After luncheon at the Bureau of Mines building, the guests will board special trains on the B. & O. Railroad to the experimental mine of the Bureau of Mines at Bruceton, Pa., 14 miles from Pittsburgh. Upon arrival there a prearranged explosion of coal dust will take place in the experimental mine as a demonstration to the visitors, and after that there will be an inspection of the mine and the explosives testing plant, the guests returning to the city at 6 o'clock in the evening. At 8 o'clock there will be a general meeting at Carnegie Music Hall under the auspices of the Pittsburgh Chamber of Commerce, with an address by Secretary Lane, an organ recital by Dr. Chas. Heinroth, and a moving picture prepared by the National Coal Association, "The Story of Coal," will be given a first presentation.

On Tuesday, September 30, the new laboratories will be open for inspection by the guests the entire day, and at 2 o'clock the elimination contests in the National Safety First-Aid and Mine-Rescue meet will be held at Forbes Field, also the awarding of the state championships. At 5 o'clock, at Forbes Field, there will be a demonstration of the explosibility of coal dust, and at 8 o'clock



Testing out the Geophone—a listening device used by the Bureau of Mines to locate entombed miners

the Chamber of Commerce will present a pageant typifying the spirit of the mining industry, with music by the band of the Carnegie Institute of Technology.

On Wednesday, October 1, at 9 a. m., there will be a final mine-rescue contest by the ten successful teams of the previous day at Forbes Field, with a presentation of the national cups and prizes. At 2 o'clock in the afternoon announcement of the J. A. Holmes Safety Association will be made by Dr. Van H. Manning. At 2.30 o'clock the final first-aid contest, participated in by the twenty best teams of the previous day for the gold cups and prizes, will be held. At 5 o'clock there will be a demonstration of a coal-dust explosion at Forbes Field, the events closing with a smoker at the Chamber of Commerce, in which the prizes will be awarded and speeches made.

The Honorary Committee in charge of the dedication of the Pittsburgh station is as follows: Mr. George S. Oliver, president, Pittsburgh Chamber of Commerce; Mr. John F. Herron, president, City Council of Pittsburgh; Mr. Harry N. Taylor, president, Na-

tional Coal Operators Association; Mr. John L. Lewis, acting president, United Mine Workers of America; Mr. Horace B. Winchell, president, American Institute of Mining and Electrical Engineers; Hon. Franklin K. Lane, Secretary of the Interior; Dr. Van H. Manning, director, Bureau of Mines; Dr. S. B. McCormick, chancellor of the University of Pittsburgh; Dr. Arthur A. Hammerschlag, president of the Carnegie Institute of Technology; Dr. S. W. Stratton, director, Bureau of Standards; Dr. R. F. Bacon, director, Mellon Institute; Mr. Seward E. Button, chief, Department of Mines, State of Pennsylvania; Dr. D. Van Schaack, president of the National Safety Council; Mr. T. A. O'Donnel, president, American Petroleum Institute; Mr. Mortimer E. Cooley, president, American Society of Mechanical Engineers; Mr. Fayette S. Curtis, president, American Society of Civil Engineers; Mr. J. A. Capp, president, American Society of Testing Materials; Dr. William H. Nichols, president, American Chemical Society; Mr. Calvert Townley, president, American Society of Electrical Engineers; Mr. G. H. Neilson, president, Engineer Society of Western Pennsylvania; Dr. W. D. Bancroft, president, American Electro-Chemical Society; Mr. R. T. Stull, president, American Ceramics Society; Mr. E. N. Zern, president, Coal Mining Institute of America; Mr. James R. Angell, chairman, National Research Council.

MEXICAN PETROLEUM CO. AWARDED OIL CONTRACT

The Division of Operations on August 9 announced that the Shipping Board has awarded to the Mexican Petroleum Corporation the contract for 500,000 barrels of grade "C" fuel oil to be taken in cargo lots during the next twelve months. The price is \$1.18 per barrel. Point of delivery is the United States Shipping Board bunkering station at St. Thomas, W. I.

In accepting this bid the board announced that it was on the agreed basis of delivery No. 2 as given in the invitation for bids recently issued by the Division of Operations, which is as follows:

"Supplier to furnish, transport and deliver cargo lots into storage tanks of the United States Shipping Board's oil bunkering station at St. Thomas, W. I.; delivery to be accomplished within thirty (30) days after receipt of written notice from the Division of Operations. Supplier to guarantee a discharging pressure at ship pumps not less than 75 pounds. Shipping Board shall be allowed seventy-two (72) running hours to take delivery at St. Thomas. Demurrage shall be payable at the rate of \$80 per running hour, but if by accident delay should occur at St. Thomas due to fire or breakdown of machinery of the United States Shipping Board, the rate of demurrage shall be reduced to \$40 per running hour for time so lost."

RAILROAD BROTHERHOOD MOVEMENT SCORED BY THOMAS IN SENATE SPEECH

In the course of an address to the Senate, Senator Thomas, of Colorado, commented on the labor situation growing out of the demands of the railway brotherhoods as follows:

"We are face to face with a demand—not a request, but a demand—on the part of something like 600,000 employes, first, that we give them \$800,000,000 at once, which confessedly will not help them at all—and they propose to suspend the operation of our great transportation systems until we do—second, to reduce the cost of living; and, third, to pass the Plumb bill, and by that means take over \$20,000,000,000 worth of property and operate it under government ownership according to a system provided by that bill.

"Just what does this mean? This is the Senate of the United States. The House is at the other end of the Capitol. Combined we represent one of the great departments of the government. Every member has taken an oath to support the Constitution of the United States, which requires him to legislate in accordance with the provisions of that instrument as he understands them. We are the delegates of the people, sent here for a specific purpose; and legislation necessarily carries with it a power of judgment. This, I think, is the first time in the history of the nation—I hope it is—and God grant it may be the last, although I fear it may not be—in which a fragment of the American people, fully organized and in control of industries vital to the public welfare, has pointed its finger to the Congress of the United States and said, 'Legislate thus and so,' failing to do which, in the language of one of them, 'We will tie up the system so that it can never operate again'; and ours is the responsibility right now of giving answer to that demand, whatever the consequence may be to us, for there can be no consequence quite as serious as that which will inevitably result from yielding to such a demand, since it will be followed by others until we shall simply be here, like the French assembly during the revolution, finally, to do the bidding of the throngs in the gallery or be mobbed and butchered if we refuse. It means an end of representative government. Let us not flinch the issue. If I am not right in my conclusion, I want to be corrected. There are Senators upon the floor of vastly more legislative experience than I, many better acquainted with republican institutions, their history, and the history of nations which have risen, matured and fallen. If that is not the result of this demand, I want to be corrected. If it is, what does our duty require of us?

"I think this question is quite as pregnant with importance as any treaty between this country and other nations possibly can be.

"Now, I do not want to be extreme in my

statements, and particularly since the honorable chairman of the Committee on Interstate Commerce has requested us to be temperate in our discussion of this serious problem, and yet I cannot in my mind characterize a threat like this from government employes to tie up and paralyze the great distributing system of the country, and by that means bring ruin and wreck and misery to all classes and conditions of men unless we accept their mandate and do their bidding, as short of treason. It would be bad enough if it came from those who are not employes of the government; it is inexcusable in them.

"Some years ago, when public excitement ran high in the State of New York because of the arrogant aggressions of the New York Central Railroad, then defying both national and state laws and regulations, Mr. Vanderbilt was interviewed regarding his attitude. His reply was, 'The public be damned!' and with that statement he sealed the fate of the agitation then progressing. The other day, in the city of Chicago, at a meeting of the organized employes of the city railroads, one of the leaders who had been appointed to negotiate a settlement, and who had succeeded, made an effort to explain the details of the agreement to the assembly, but was howled down. He then managed to say, 'Gentlemen, you are not fighting the owners of the roads; you are fighting the public,' and the reply instantly came back, 'The public be damned!'

"Please tell me, Senators, the difference between the two situations if you can, each with the same watchword, and that watchword truly expressive of the attitude of those announcing it.

"The difference is not only in the number of votes, but it is in the terrible effectiveness with which that sentiment may be carried out through the collective strength of the individuals as opposed in the other case to the collective strength of capital. In other words, it is the more dangerous of the two, if there is any difference whatever.

"There are 110,000,000 people in the United States, according to the last estimates. Six hundred thousand men are identified with this movement. That is to say, less than 1 per cent of our population proposes to take this mighty nation by the throat and starve and beat it into submission to its demands.

"Now, these demands may be perfectly fair, perfectly just, and I may vote for them after final consideration, but never under such circumstances; and I am wondering if the old spirit of Americanism, which was the mainstay of the United States during the American Revolution, that spirit which represents Anglo-Saxonism for centuries, has become so dormant, so sluggish, so stagnant, that it will sub-

mit to this situation, and leave the Congress of the United States to meet this demand, bereft of its mighty influence. If so, the United States is not worth saving. Its salt hath lost its savor, and nothing remains except that slow process of decay which has characterized the fate of many great nations of the past.

"For my part, if this country's mission is to be closed, I prefer a swift to a lingering process. If this nation, freighted with the destiny of all humankind and based upon the eternal principle of liberty regulated by law, has run its course, then let the end come as quickly as possible."

WORLD'S POTASH NEEDS COULD BE MET BY ALSATIAN MINES

Discussing future potash possibilities in Alsace, F. K. Cameron, of the Bureau of Mines, says:

One thoroughly equipped shaft of a potash mine is supposed to be competent for bringing to the surface at least 800 tons daily, and, if both shafts be fully equipped, twice this production could be realized. In other words, if all the existing shafts in the Alsatian field were put into maximum producing condition, the field should produce about 15,000 tons daily of crude salt. Such a production would correspond in round numbers to one million tons of actual potash annually, about the pre-war demand for all the world, including Germany. Hence one occasionally hears the suggestion that an international agreement be effected permitting the Stassfurt mines to supply Germany, and possibly England and Scandinavia, while the rest of the world's market be assured to the Alsatian mines.

"That the Alsatian mines can be put into shape to produce 15,000 tons daily and to convert all or any part into refined salts is feasible. Although exact figures for the pre-war price of establishing a mine in Alsace are not available, it appears that, on the average, the existing mines cost about \$3,000,000 apiece. This would mean approximately \$20,000,000 as representing the actual investment in the mines formerly held by the Germans. While no one now knows definitely what will be done with the Alsatian mines, the opinion in France seems to be that the German interests will be bought out on a valuation based on the actual investment and then resold to a corporation or corporations yet to be formed under French control. There are complications in sight. For instance, a fairly large percentage of the shares in these formerly German companies are held in France, and in 1913 the government of the Alsace-Lorraine bought interests in Reichsland and Theodore and Eugen. It is expected also that the new control will provide the capital to bring the present mines and their equipment to full producing capacity before any new shafts are authorized. It is estimated that at least three

years' time will be required. No estimates having any authoritative backing have yet been made of the additional capital which will be required, as probable costs of material and labor are purely speculative at this time, and there is great uncertainty to what extent the refining of the crude salts should be carried out to meet the market requirements, especially the American market. There is in evidence in France a strong desire that American investors shall subscribe for a substantial fraction of the required capital, but equally a firm purpose to keep the control in French or French-Alsatian hands. Outside of sentimental considerations, no clearly defined inducements for American participation have yet been formulated.

"The work of putting the Alsatian mines into good producing shape seemed to be progressing quite satisfactorily in April of this current year. The cost figures tentatively given above can be gradually lowered, but to what point it is impossible to even guess as yet. Certainly the actual cost of producing potassium chloride, at the point of production, will be always lower in Alsace than anywhere else except where it may be obtained strictly as a by-product in a procedure where the cost can be absorbed by another product. It does not necessarily follow that other sources of potash cannot be profitably utilized, because of special conditions of manufacture or transport, and this presentation of conditions in the Alsatian field will, it is hoped, be of value for prospective undertakings in America."

LENROOT SUBMITS PLAN FOR RAILROAD CONTROL

Unification of all railroads in the United States into a single national system, privately owned, with minimum earnings guaranteed, and with management shared by shippers, farmers, security owners, employees and the public, and excess profits divided between the public and employees, is provided for in a bill introduced in the Senate by Senator Lenroot of Wisconsin.

This bill is supposed to represent the views of the liberal element in Congress regarding the railroad problem and the proper way of adjusting it. The Lenroot bill is said to embody the views of the Wisconsin Senator and Nathan L. Amster, president of the Citizens' National Railroad League, the latter being a railroad reorganizer of long experience. Senator Lenroot believes that in his bill he has afforded protection for the interests of investors, the public, labor and the shippers and has provided a means of obtaining economical and efficient transportation at reasonable cost.

The principal features of the Lenroot bill are:

1. The ownership and operation of all the railroads by one privately owned and privately operated railroad company, with full public control.

2. The management of this corporation, under the supervision of the Interstate Commerce Commission, by a board of eleven directors selected by the President (and confirmed by the Senate) out of a limited number of names proposed to the President by the various classes of the public—two from the employes, two from commerce, industry and the shippers as represented by the United States Chamber of Commerce, two from the farmers as represented by recognized farm organizations, three from the security holders, one from the Interstate Commerce Commission and one from the State Railway Commissions.

3. The selection by the directors of a Director-General, who holds office at their pleasure, to operate the roads under such regional divisions as the directors may determine. An efficiency and economy board of five men selected by the President out of engineers proposed to him by the leading engineering and technical societies of the nation, who will study service and suggest and supply improvements and inventions.

4. The valuation of all the railroads by averaging the original cost less depreciation, the reproduction cost less depreciation, and the net earnings over the last ten years capitalized at 5 per cent per annum, varied by urgent equities. Procedure is provided for expediting the valuation and for an early judicial determination of the fairness of such valuations. Unearned increment for the future will be excluded.

5. Existing bonds will not be disturbed; new stock with maximum dividends of 6 per cent per annum will be exchanged for existing stock as valued by the Interstate Commerce Commission. Earnings in excess of 6 per cent will go: 40 per cent to labor, 30 per cent to the public for improvements and retiring outstanding stock, thus reducing rates, 30 per cent to the stockholders.

6. The government will guarantee dividends of 4 per cent on all stock issued by the corporation. No stock can be issued without the consent of the Interstate Commerce Commission. It will be a crime to try to use political influence to obtain promotion or employment with the corporation.

7. The directors must establish various labor boards with equal representation for labor to suggest improvements of service, working conditions and safety, and to study wages, standards of living and mediate in all labor disagreements. The right to organize and the right of collective bargaining are guaranteed.

CALIFORNIA'S MINERAL PRODUCTION SHOWS GAIN

Compilation of the final returns from the mineral producers of California for 1918 has now been completed by the statistical division of the State Mining Bureau, under the direction of Fletcher Hamilton, state miner-

alogist. The total value amounted to the record sum of \$199,753,837, being a net increase of \$38,550,875 over the 1917 figures. There were fifty-four different mineral substances, exclusive of a segregation of the various stones grouped under gems; and of the fifty-eight counties in the state, all but two contributed some mineral product.

As compared with the 1917 output, the notable features of 1918 are the enormous increase in petroleum valuation and the decrease of over three million dollars in the gold yield. Of the metals, copper decreased approximately 740,000 pounds in quantity and \$1,444,000 in value; gold decreased \$3,558,342; manganese increased in tonnage and value; and quicksilver slightly in value, while silver, lead, zinc, and tungsten showed decreases.

Petroleum increased over four million barrels in quantity, and the prices per barrel for all grades continued to rise so materially that the net result was an increase of \$40,483,012 in total value.

Decided changes are shown by some of the structural and industrial materials; among others, cement and chromite increasing, with magnesite and miscellaneous stone showing decreases. Of these, chromite leads with a gain of over two and a half million dollars. Of the salines, potash increased over two and a half millions in value, and borax decreased over a half million.

Krupps Plan New Plant

Krupp Works of Essen are reported to be planning the erection of a gigantic plant at Apeldoorn, Holland. The plant will be connected with the iron of the Ruhr district and coal of Westphalia. It is believed that offers of German iron and steel products are being sent to England through a Belgian exporter.

Opens Black Hills Town

The sale at public auction of several hundred business and residence lots in the government town site of Newell, South Dakota, has been authorized by the Secretary of the Interior for October 1, 1919.

Newell is located in the Belle Fourche Valley, northeast of the Black Hills mining region. It is the largest town in the reclamation project which has been completed by the government at a cost of three and a half million dollars. The irrigable areas tributary to the town and now largely in cultivation comprise 50,000 acres, and in 1918 produced a crop valued at \$1,276,115.

Canadian Labor Conference

There will be held at Ottawa, Canada, beginning September 11, 1919, a national conference to consider labor legislation. It will meet under the auspices of the Canadian government, and, besides federal and provincial governments, employers' and employees' organizations will be represented.

SENATE BEGINS SEARCHING COAL PROBE— EXTRACTS FROM THE TESTIMONY

No effort is being made by anyone concerned to minimize the possible far-reaching consequences of the Senate coal investigation, which began August 26. The hearing is being conducted by Senator Frelinghuysen, the chairman of the subcommittee of the Interstate Commerce Committee, which was selected for the purpose. One of the possibilities of the hearing is that it will furnish the information which will guide Congress in the drafting of legislation which will affect the coal industry. One of the significant features of the hearings thus far was that portion of the testimony of Harry N. Taylor, president of the National Coal Association, which dealt with the labor situation. Extracts from Mr. Taylor's remarks and some of the questions put to him by members of the committee follow:

MR. TAYLOR: I have been employing union labor ever since I was a boy, and I will not tell you how long it is, but it is more than twenty-five or thirty years. Since 1886 I have dealt with union labor, I have no quarrel with union labor, and what I say now is not a reflection upon union labor, but we are all going through a stage of unrest. I would rather say we are all going through a siege of unrest in the labor world. Early in May I was advised that the United Mine Workers had a meeting of their Policy Committee, at which they mapped out the demands that they would make upon the operators with the signing of peace. I would like to make that clear; I would like to explain it by saying that the central competitive field—what is known as the central competitive field in this country—is composed of Western Pennsylvania, Ohio, Indiana and Illinois. Since 1898 the operators and miners in the central competitive field have met in convention and have established their wage scale and made what is known as the interstate contract, based upon the contract of 1898, which was the basic contract of the country. Using that contract as a basis, the other surrounding fields arranged their labor scale in conformity, in a competitive way, both as to earning power and as to market conditions, based on that central competitive scale. Then all the outlying districts had their own conventions, and, working with their men, worked out their wage-scale agreements and contract agreements.

In the war period the necessity of continued production and loyalty on the part of both miners and operators was emphasized, and there was an agreement made known as the Washington agreement, which was a kind of blanket agreement that covered all of the contracts which are based on the central competitive field, and it was made for the period of the war. The men were given a substan-

tial advance in wages. The President and Dr. Garfield and all the Fuel Administration authorities recognized that agreement, and it was understood that the miners should continue work on account of that substantial advance given them in their wages, and also on account of their loyalty, and produce coal throughout the period of the war. It was further understood that the period of the war would be up to the signing of peace; that is, when the peace treaty was signed and the declaration of peace made, it was understood that the agreement was then ended.

The reason I make this explanation so in detail is on account of the fact that in all previous years the contracts made in the central competitive field and other fields of the country did not bear the same dates of expiration. In other words, the competitive field contract expired on the first of April. The contract with the miners in the southwestern part of the country did not expire until the 31st of July, and so on. So it was hardly possible, if there were labor troubles in certain districts that it would become national, because the miners in those districts would be covered by a similar contract, but under a different date, but the Washington agreement carried by all of those dates. So we are facing a situation now that when the war situation automatically ceased with the signing of peace there is no contract between the miners and operators of this country, so that all of the contracts between labor and the various operators expire on one day.

THE CHAIRMAN: And a renewal has to be made?

MR. TAYLOR: And a renewal has to be made in all districts possibly at some certain date, or possibly on certain different dates, as was the custom in the past. But the fact remains that all existing contracts between the miners and the operators will expire the day the peace treaty is signed.

Now the miners' organization had their representatives in Europe. Mr. Frank Jones, the president of the United Mine Workers, was the delegate who sat with the European leaders of the mining industry, and of course was in conference with them as to the world-wide situation and the demand to be met in other countries, as well as giving them information in regard to our conditions. After his return there was a meeting in Indianapolis, so I am advised, although this is simply a matter of rumor—we have no connection with the miners as far as getting information is concerned, but we know it to be a fact because we have seen it published since in the mining journals—that the demand they intend to make is largely in conformity with the demand made by the English miners on the English

coal operators, and that is that the present contract for an eight-hour day shall be cut down to a six-hour day and that instead of working six days a week, or forty-eight hours a week, they intend only to work five days a week, and their demand goes on further to say that in addition to this six-hour day and the five-day week there shall be a substantial increase in the present wage. That demand so far has not stated what that substantial increase shall be in dollars and cents.

SENATOR MYERS: Sixty per cent increase, some newspapers report.

MR. TAYLOR: Well, nobody knows. I will explain that in a moment. That is the demand. Further than that, the national officials were authorized, or rather instructed by their board—what they call their Policy Committee—to have drawn up a bill to present to Congress for the nationalization of all of the mines of this country. That is the information we get as to what their demand will be. The miners have called a convention of all of their organizations which they claim represents about 700,000 men—I believe it is practically 500,000 men in reality, but that is immaterial—a convention of all the miners has been called at Cleveland, Ohio, for the 9th day of September. Their procedure is to have the district presidents of their organization in each state or each district present the demands that they desire to have put into effect in their own districts. Then this national convention, after hearing all their different demands, is to formulate a demand which they will make upon the operators of the central competitive field.

As I understand, and as I explained before, after that demand is made the other fields will base their demands upon that basic contract.

A call is already issued for the 25th day of September at Buffalo, New York, for a conference between the miners and the operators, at which they desire to have a new wage contract made with the central competitive field. Whether they will change these demands that I have enumerated to you at their convention in Cleveland—

SENATOR MYERS (interposing): When was that?

MR. TAYLOR: On the 9th day of September, that is, the miners' convention, and the joint convention will be on the 25th of September, at Buffalo.

SENATOR WOLCOTT: The 25th of September convention is what?

MR. TAYLOR: It is a convention of the central competitive field.

MR. WOLCOTT: Is all this based on the assumption that the treaty of peace will be signed prior to the 25th of September?

MR. TAYLOR: Well, they are getting restless. That is what I am leading up to. Already the more radical element are determined to put into effect the soviet government of mines. In an interview published widely in the papers, Mr. William Greene, the secretary of the

miners, is quoted as saying that they do not want government control of mines unless they have with it democratic management. They do not want any Burlesons, as they put it. They want the government to have the mines, but they want to run them for the government.

As in every industry, there are always what we call radicals, and always conservative men. In the State of Illinois, one of our largest producing states, just during the past two weeks there has been an uprising of the radical element with the express purpose of throwing out of office Mr. Frank Farrington, president of their union, largely because he is a man who believes that when a contract is made it should be carried out, and because he will not tolerate the infringement of the miners' contract, believing that the best interests of his organization are in living up to their contract.

The radicals called a rump convention last week and tried to throw Mr. Farrington out of office and shut the mines down all over Illinois, greatly curtailing the production of coal in that state.

In the State of Kansas a gentleman by the name of Alexander Howett, who has a reputation all over the United States as a radical leader, has called a strike to establish the principle that a man must be paid his wages whether he works or not, if the operator desires to have him employed. In fact, the largest producing company down there had a strike in April. There was a strike which was called by Mr. Howett. The company used some of their superintendents and managers to run their pumps and their fans, and their mine managers, who were capable of running an engine to lower the men into the mines, to see that the pumps were kept in operation so that the mines would not be flooded. Mr. Howett claims that the men on strike should be paid because another man stayed there to run the boiler or to run the fan in the fan house, and because the company refused to pay the man on strike and recognize the principle that a man who touched an engine that they ordered him to touch was not violating any order of the mine workers, he called another strike and would not recognize their right to say that a man should run an engine. The company said they would not recognize the right of Howett to say that a man should not run an engine, and as a result Mr. Howett called a strike of all the miners of that company, and they struck.

SENATOR MYERS: Are the miners still out?

MR. TAYLOR: They are out, and have been for five weeks.

In addition to that, Mr. David Frampton, president of the Missouri miners, has called all the miners out in sympathy with the demand made by Mr. Howett in Kansas, and if the company did not accede to those demands, they received permission from their national president to pull out all of the miners from the mines in Missouri as a protest

against the non-payment of the men that were on strike, because the miners asked for compensation on the basis that a man who touched anything around a mine—if a man touched anything around a mine when they were on strike—the company should allow compensation to one of their number who was on strike, and allow that compensation while he was away.

SENATOR MYERS: Did the men all come out?

MR. TAYLOR: The men did not all come out. They tried to call them all out on the 18th of August, but the men did not come out altogether. But they put an assessment on their men to keep the mines of the company where the men were on strike—to keep them permanently closed down.

ADVISORY TAX BOARD WILL BE DISSOLVED SEPTEMBER 30

The Advisory Tax Board, which was established under authority contained in the revenue act of 1918 to advise the Commissioner of Internal Revenue in the administration of the income and excess profits tax laws, will be dissolved at the end of September, according to an announcement of the Treasury Department. The reasons for the dissolution of the board at the present time are stated to be the facts that it has fulfilled its function of formulating policies and regulations governing the collection of these taxes, and that the income tax unit of the Internal Revenue Bureau has been developed to the point where it is capable of handling competently the classes of cases which have been handled by the board, together with the fact that present members of the board have expressed the desire of being relieved of their duties at the earliest date consistent with the proper administration of the tax laws. The members of the board who are retiring to resume their former occupations are Dr. T. S. Adams of Yale University (chairman), Mr. J. E. Sterrett of Price, Waterhouse & Company, New York City; Mr. Stuart W. Cramer, cotton manufacturer of Charlotte, N. C.; Mr. Fred T. Field, lawyer of Boston, and Mr. L. F. Speer, Treasury Department tax expert and former Deputy Commissioner of Internal Revenue.

The origin of the Advisory Tax Board arose out of the necessity of strengthening the ordinary forces of the Internal Revenue Bureau to administer the unprecedented taxes imposed by the law. In 1917 twelve prominent business men and experts in taxation, and in addition three of the ablest lawyers obtainable, were secured to act as reviewers and advisers. The number of this body was gradually decreased during 1918, and with the passage of the revenue act of 1918 the number was fixed at five, to be known as the Advisory Tax Board and to serve as long as the need for such outside assistance and advice should be required by the Commissioner of Internal Revenue.

The retiring board has been of great assistance to the Bureau of Internal Revenue not only in the formulation of income and profits tax regulations and administrative practices and in the settlement of thousands of individual cases, but has also been conspicuously helpful in organizing the regular permanent machinery of the bureau for the application to the millions of tax returns filed of the principles and methods adopted during the past two years for the determination of tax liability. The income tax unit of the bureau, on which will now devolve the responsibilities which have been carried by the Advisory Tax Board, and which has to do immediately with the administration of the income and profits tax laws, has been expanded in size so that its personnel now numbers approximately 3,000 persons as compared with less than 400 at the time the war revenue act of 1917 was passed by Congress. This force consists of accountants, fresh from commercial practice; engineers and technologists, lawyers, statisticians and experts in general administration. This force has been put through an intensive course of special training in the law, regulations and business practices, knowledge of which must be applied to the cases arising in the jurisdiction of the bureau. The work of this unit has been highly specialized so that distinctive kinds of cases are handled by the members of the unit who are particularly qualified in the line of business to which the cases relate. A typical example of this method of administration is found in connection with the tax returns of individuals and corporations engaged in the oil, mining and lumber industries. These natural resources have been grouped in a special division of the work, and the tax liability in every case is determined by accountants, valuation experts and others who have been drawn from these fields of industrial activity.

The decision of the department to discontinue the Advisory Tax Board was reached after very careful consideration and is based on the facts that the board has substantially accomplished the purposes for which it was created and that the present members may not reasonably be expected to remain longer away from their private businesses and professions.

Exports of Iron and Steel Heavier

The export trade of the United States in iron and steel continues to improve. Railroad material has been sold to France, Cuba, Chile, Argentine, Java and Formosa. Sales of other iron and steel products are reported to Spain, England, Portugal, Italy and Japan.

The South American trade has been invaded to some extent by German and British houses, which has checked the volume of United States sales in that country.

England has recently been a good market for American products, mostly semi-finished material and some pig iron.—Bureau of Mines Mineral Investigations.

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TARIFF SCHEDULE FOR ZINC IS PASSED BY THE HOUSE

Duty on zinc imports is provided as follows in the bill passed by the House on September 2.

SEC. 1. Zinc-bearing ore of all kinds, including calamine, containing less than 10 per cent of zinc, shall be admitted free of duty; containing 10 per cent or more of zinc and less than 20 per cent, one-fourth of 1 cent per pound on the zinc contained therein; containing 20 per cent or more of zinc and less than 25 per cent, one-half of 1 cent per pound on the zinc contained therein; containing 25 per cent of zinc or more, 1 cent per pound on the zinc contained therein: *Provided*, That on all importations of zinc-bearing ores the duties shall be estimated at the port of entry, and a bond given in double the amount of such estimated duties for the transportation of the ores by common carriers bonded for the transportation of appraised or unappraised merchandise

to properly equipped sampling or smelting establishments, whether designated as bonded warehouses or otherwise. On the arrival of the ores at such establishments they shall be sampled according to commercial methods under the supervision of government officers, who shall be stationed at such establishments, and who shall submit the samples thus obtained to a government assayer, designated by the Secretary of the Treasury, who shall make a proper assay of the sample, and report the result to the proper customs officers, and the import entries shall be liquidated thereon, except in case of ores that shall be removed to a bonded warehouse to be refined for exportation as provided by law. And the Secretary of the Treasury is authorized to make all necessary regulations to enforce the provisions of this paragraph.

SEC. 2. Zinc in blocks or pigs and zinc dust, $1\frac{3}{8}$ cents per pound; in sheets, $1\frac{3}{4}$ cents per pound; in sheets coated or plated with nickel or other metal or solutions, $1\frac{3}{4}$ cents per pound; old and worn-out, fit only to be remanufactured, 1 cent per pound.

The committee in its report says:

"There are extensive zinc mining districts in Missouri, Kansas, Oklahoma, Wisconsin, Utah, Idaho, and elsewhere in the United States, and prior to the outbreak of the war in 1914 the total annual production of zinc ore in the United States was approximately 680,000 tons, which about equaled the domestic consumption.

"Prior to 1904 importations of zinc ore into the United States were negligible, but in that year 2,000 tons were imported. Importations steadily increased until 1909, when importations of zinc ore totaled 113,000 tons. The foreign ores came chiefly from Mexico, and the great increase in importations was most detrimental to the domestic industry.

"The framers of the tariff act of August 5, 1909, recognized the necessity of an import duty on zinc ores and levied a duty of 1 cent per pound on the metallic contents of the higher grade ores. Under the stimulus thus afforded, together with the decreased imports from Mexico due to internal troubles, the zinc mining industry in the United States prospered.

"The tariff act of October 3, 1913, repealed the specific duties on zinc ores of the Payne law and in lieu thereof imposed an ad valorem duty of 10 per centum. Importations under this ad valorem rate have been demoralizing to the domestic industry. The importations of zinc ore in 1915 amounted to 79,000 tons, in 1916 to 291,000 tons, and in 1917 to 262,000 tons.

"In the Joplin, Mo., district, where before the war 50 per cent of the zinc ore produced in the United States was mined, 85 per cent of the mines are now closed down, and conditions are little, if any, better in the mining districts of Oklahoma, Kansas, and elsewhere in the United States."

Anthracite Production

Anthracite production for the first half of August continues to show an increase over output in the corresponding period in the basic year 1916, which was the last normal year in the coal trade, and which was the year upon which allotments of anthracite were based by the United States Fuel Administration. While shipments in July of this year showed an increase of 7.7 per cent over June, and amounted in all to 6,052,234 tons, or 619,456 long tons more than shipped in July, 1916, the first half of August is showing a further increase and production is well in excess of production for the first two weeks of July.

According to figures issued by the United States Geological Survey, the production of anthracite in the two weeks ending July 5 and July 12 of this year was 3,282,000 net tons. For the two weeks ending August 9 and August 16, the production was 3,512,000 net tons, an increase of 230,000 net tons, or almost 20,000 net tons per possible working day, as compared with the two weeks in July.

NON-FERROUS METALS SALES REACH TOTAL OF \$1,216,427

The Director of Sales announces sales of surplus war materials made during the week ended August 1 amounted to \$4,032,528.54, bringing the total sales of surplus made between January 1 and August 1, 1919, to \$363,814,554.31, which sum represents a recovery of 77 per cent of the cost of the materials to the government.

Sales of non-ferrous metals amount to \$1,216,427.35. Embraced in this report were sales of quantities of platinum and iridium which were sold at fixed prices, the former metal bringing \$105 per ounce and the latter \$200 per ounce.

Australian Iron Imports

Australian imports of iron and steel products from the United States for seven months shows a large increase over the previous fiscal year. The total imports for 1918 to 1919 for that period was about \$26,800,000, while for the same period, 1917 to 1918, it was \$18,700,000.

British Steel Exports

British exports of iron and steel manufactures from June, 1919, is reported at 5,280,217 pounds sterling, and exports of iron ore amounted to 739,646 pounds sterling, which was 1,063,080 pounds sterling less than in June, 1918.

China's Iron Output

It is estimated that the output of iron in China will amount to 500,000 tons for 1919.

COMMITTEE REDUCES DUTY PROPOSED FOR MAGNESITE

The bill relating to a duty on magnesite, entitled H. R. 5218, which was referred June 7, 1919, to the Ways and Means Committee, was reported with amendments to the House on July 29, 1919. The bill as reported provides for a duty of $\frac{1}{2}$ cent per pound instead of $\frac{3}{4}$ cent per pound on the crude ore; $\frac{3}{4}$ cent per pound instead of $1\frac{1}{4}$ cents per pound on calcined, dead-burned grain magnesite; and $\frac{3}{4}$ cent per pound and 10 per cent ad valorem on magnesite brick instead of 25 per cent ad valorem. Commenting on general conditions in the magnesite industry, W. C. Phalen, of the Bureau of Mines, says:

"The conditions in the magnesite industry still remain unsettled. This is to be expected until the question is definitely settled as to the conditions under which foreign magnesite is to be imported. The consumers of magnesite have not ordered in the quantities which they otherwise would have. A general revival in the steel industry and in the building trades has resulted in an increasing call for magnesite, however, and orders have come to the concerns in Washington to justify one of the companies to resume operations on a partial basis. It is expected that the July production in Washington will amount to 2,500 tons of dead burned grain, that during the month of August the Northwest Magnesite Company will have four kilns in operation, and that there will be a production of 7,000 tons, barring accidents.

"Until something definite is decided upon with reference to conditions under which the foreign material can come in, little can be done in the way of intelligent planning for future development work.

"In California, where costs are high and where lowest production costs depend on working at maximum capacity, some of the plants now closed down will not start until conditions under which the plants are to work are known.

"In connection with recent hearings before the Ways and Means Committee of the United States House of Representatives, some very interesting information has appeared bearing on the quality of domestic magnesite, and also on the application of this mineral to the flooring industry."

Steel Practice Changes

The present method of steel manufacture has changed from that in vogue before the war; basic open hearth and electric furnace practices have greatly increased at the expense of acid open hearth practice. This was in part due to the difficulty of obtaining sufficient high-grade ore from foreign countries and the necessity of using local ores.

GOVERNMENT RAILROAD OPERATION

By H. N. LAWRIE¹

Of the total tonnage carried by our rail system, 58 per cent comes directly from mines. Upon the mining industry falls a large part of the costs of freight transportation and railroad maintenance. The proper solution of the railroad problem which now confronts the nation is as vital to the mining industry as it is to the rail system itself. The dependence of the rail system on mine output for tonnage is no less than the dependence of the mines upon the most economical management of the rail system to supply cheap transportation for mine products. A prohibitive transportation rate will automatically force certain mines to close, and this loss of tonnage has the effect of reducing the volume of traffic, thereby increasing the cost of transportation to all other shippers.

FEDERAL OPERATION

Revenue passengers carried (item 1) increased 1.5 per cent, while passengers carried one mile (item 2) increased 8 per cent, and the tons carried one mile (item 7) increased 2.7 per cent, combining to show an increase in total work delivered in traffic units (item 12) of 3.9 per cent. For the past three years, under private management, the number of traffic units delivered per man employed have shown a marked increase. In 1918, with an increase of 3.9 per cent in the number of traffic units over 1917, the number of traffic units per man employed (item 16) decreased 1.6 per cent and the number of hours employed in the delivery of 1,000 traffic units (item 18) increased 0.8 per cent.

The advantages of zoning freight and passengers had the effect of increasing the tons loaded per car (item 23) 9 per cent and the number of passengers carried per car (item 22) 16.7 per cent. A further analysis indicates that speed of movement was not sacrificed by overloading, which is a decided credit to the Railroad Administration. However, these favorable results still further emphasize the inherent difficulty of the government to deal with labor in an efficient manner. An increased traffic, coupled with marked improvement in loading, should have insured a greater output of traffic units per man employed or hours worked. Labor dominated the situation under threat and Congress passed the Adamson law, which added some 60 to 65 million dollars to the payroll. The expansion in the number of employees has since been (item 9) 5.6 per cent, evidently beyond the requirements of the work performed, and resulting in a less output of work per man.

The Railroad Administration then usurped the powers of the Interstate Commerce Commission to fix rates. Labor, having first succeeded in expanding the payroll numerically, then demanded increases in compensation,

which were granted by the Railroad Administration and were made retroactive in payment. The horizontal rate increase of 25 per cent in 1918 resulted in an increase of average receipts per ton-mile (item 8) of 18.8 per cent and in the average receipts for passenger mile (item 3) of but 15.5 per cent.

It is apparent that the Railroad Administration underestimated what the cost of transportation would be, and their rate increases did not create sufficient revenue, so that a net operating deficit of \$509,872,553 was recorded for the eighteen months of Federal control ending June 30, 1919. A decline in the volume of traffic for the first six months of 1919 of 14.2 per cent in the number of ton-miles per mile of road has contributed to increase the deficit.

While the deficit already creates a burden of \$5.09 per capita so that a family of six people will have to pay in excess of \$30.00 to make up for the deficiencies of finance and management of the Railroad Administration, the probability that that burden will increase more rapidly from now on is very great, which emphasizes the need for returning the railroads to private management without delay.

FEDERAL MAINTENANCE

The cost of maintenance of way per 1,000 traffic units (item 13) for 1918 shows an increase of 41.4 per cent, but, since the aggregate compensation (item 10) shows an increase of 43.7 per cent, it indicates that the volume of work done was less. The maintenance of equipment per 1,000 traffic units (item 14) increased 56 per cent, but this, too, reflects increased wages and material cost rather than an increase in the volume of work done. Mr. Hines' testimony of March 1, 1919, gives the actual number of ties and miles of rail laid in the past three years as follows:

Cross Ties Laid on All Roads

1916	90,140,160
1917	81,154,529
1918	78,958,224

Track Miles of New Rail Laid

1916	9,831
1917	8,233
1918	7,431

These figures confirm the neglect to which the roadway of our rail system has been subjected.

The Southern Appalachian Coal Operators' Association on August 27 issued the statement that "10 per cent of the coal cars belonging to the entire railroad system of the United States are unavailable for use in hauling coal. Of the 700,000 cars built for hauling coal only 635,000 can be secured for transporting coal to the consumer." This statement indicates to what serious degree

¹ Economist, American Mining Congress.

the maintenance of equipment has been allowed to decline. Further, in view of the decline of 14.2 per cent in the ton-miles per mile of road for the first six months of 1919, it is evident that much of the rolling stock which represented a surpluse in 1918 has now been withdrawn from service for repair. This neglect of maintenance of roadway and equipment is not only a tremendous burden on the cost of transportation, but also seriously impairs the delivery service upon which the consumer and producer are alike dependent. This condition has already been a handicap to our productive industries, tending to limit output and thereby force up the cost of living. If full production is still further interfered with, the cost of living will become prohibitive for the average citizen, and many industries will shut down because they will be unable to pay a wage to cover this cost of living.

It is only too evident that the railroad system has become a rapidly wasting asset under Federal control, a condition which is not in the interest of the employes any more than it is to the producer, the consumer or the traveling public. Safety of travel and speed of delivery will be greatly impaired unless the roadway and equipment are brought up to standard condition. The government in turning over the railroads to private management should make every assurance that the rates will be so adjusted as to make possible a reasonable and uniform return to the investors in railroad securities, in order that the necessary capital will be available to re-vitalize the railway system. The government may also assure labor of a reward for the more efficient performance of its work. In view of the fact that the output of work per man employed decreased during 1918, it would seem that labor has no right now to ask, nor the government to grant, a rise in wages. In having granted the demands of labor during this period of Federal control, the government has already reached the height of paternalism at public expense. The war emergency is over and the time has arrived to win the economic benefits of the more efficient private management.

Announcement has been made by the officials of the Quicksilver Mining Company of the consolidation of that company and the Yellow Pine Mining Company of Yellow Pine, Nevada. It is reported that they will immediately start work in the mines and equip them with the latest machinery to facilitate the extraction of the ore which they believe to be valuable.

Coast Equipment Company, Merchants Exchange, San Francisco, Cal., have been appointed representatives for the Atlas Car & Mfg. Co., for California and Nevada. All inquiries from this territory should be addressed to them.

AMERICAN INSTITUTE OF MINING AND METALLURGICAL ENGINEERS

In view of the large number of coal mines centered about Chicago, it is planned to make the Chicago meeting to be held at the Congress Hotel, September 22-26, of especial interest to the coal industry. A large proportion of the 150 technical papers prepared for discussion will be on subjects related to coal, coal mining and coke. Among these is a carefully prepared symposium on sulphur in coal. Excursions have been arranged during the meeting that will be particularly attractive to the coal man; on Thursday the trip to LaSalle will include the inspection of operating coal mines in the district, and late on Thursday night a party will leave for the mines in Franklin and McCoupin Counties, where some novel and ingenious ideas in plant design and methods of operation have been adopted and proven practicable. The trip to the Gary Steel Mills on Tuesday will include an inspection of the immense coke ovens and by-product plant.

Metallurgists and electrical engineers will be much interested in the demonstration to be made of the production of metallic tungsten and molybdenum at the plant of the Fansteel Products Company, North Chicago, on Tuesday, September 26. As a part of the program for the Chicago meeting, an excursion has been arranged to Milwaukee to visit the various mining machinery plants in the vicinity, and a stop will be made en route at the Fansteel plant. The entire metallurgical process will be shown, from the preparation and purification of the commercial concentrates, and including sintering the pulverent metal obtained into homogeneous billets by the use of currents of enormously high amperage.

The National Exhibition of Chemical Industries is being held at the Coliseum, Chicago, the same week as the Institute meeting. Members of the Institute have been extended an invitation to attend this exhibition.

LACK OF FUNDS HALTS WORK ON MONTHLY MINERAL BULLETIN

The monthly bulletin has been issued by the Bureau of Mines for July. The work of the Minerals Investigation was carried on under a special appropriation made during the war. As this appropriation expired on June 30, a considerable part of the staff engaged in this work has had to be disbanded. It is expected that in the course of the next month or two the bulletin will be resumed in some form. In the meantime, such matter as may be available will be released at the regular time each month. The bureau believes that this work has been of value to the industries concerned, and is willing to make every effort to reorganize and maintain this work on such scale as may be possible.

CLASS I ROADS UNDER FEDERAL CONTROL, CALENDAR YEARS 1917 AND 1918
COMPILED BY H. N. LAWRIE FROM STATISTICS FROM THE RAILROAD ADMINISTRATION.

Item	1917	1918	Per cent of increase 1918 over 1917
1. Revenue passengers carried.....	1,051,644,191	1,077,982,384	1.5
2. Passengers carried one-mile.....	39,361,369,062	42,498,248,256	8.0
3. Average receipts per passenger-mile (cents).....	2.089	2.413	15.5
4. Tonnage of mine products and oils.....	*710,529,158	*706,156,452	80.6
5. Total freight tonnage originating on road †.....	1,237,823,866	1,229,116,759	80.7
6. Per cent mine products to total tonnage.....	57.4	57.5	...
7. Tons carried one mile.....	392,547,347,886	403,070,816,694	2.7
8. Average receipts per ton-mile (cent).....	0.713	0.847	18.8
9. Total employees.....	1,723,734	1,820,560	5.6
10. Aggregate compensation.....	1,730,057,342	2,581,884,559	49.2
11. Total hours worked.....	4,709,867,844	4,929,185,725	4.7
12. Traffic units‡.....	510,631,455,072	530,565,561,462	3.9
13. Maintenance of way & struct. per 1000 traffic units.....	\$0.87	\$1.23	41.4
14. Maintenance of equipment per 1000 traffic units.....	\$1.34	\$2.09	56.0
15. Traffic unit per man employed.....	296,236	291,414	81.6
16. Traffic unit per dollar of compensation.....	295	205	830.5
17. Compensation per 1000 traffic units.....	\$3.39	\$4.87	43.7
18. Hours worked per 1000 traffic units.....	9.22	9.29	0.8
19. Passenger train cars.....	52,680	53,515	1.6
20. Freight train cars.....	2,284,660	2,299,840	0.7
21. Locomotives.....	61,368	62,759	2.3
22. Passengers per car.....	17.29	20.18	16.7
23. Tons per car.....	24.75	26.97	9.0
24. Passenger-train car-miles (incl. passenger-train car-miles in mixed trains).....	3,488,930,891	3,267,258,431	86.4
25. Passenger-train car-miles per pass. train car.....	66,229	61,053	77.8
26. Freight-train car-miles (including freight-train car-miles in mixed trains).....	23,217,023,740	22,682,630,072	82.3
27. Freight-train car-miles per freight train car.....	10,162	9,863	82.9
28. Locomotive-miles (excludes work service).....	1,745,755,333	1,684,404,165	83.5
29. Locomotive-miles per locomotive.....	28,447	26,839	85.7

* Excludes tonnage of oil products.

† Excludes a small amount of tonnage unassigned.

‡ Based upon passenger-miles and ton-miles, considering one passenger mile equivalent to three ton-miles.

§ Decrease.

TARIFF STATUS SHEET

Mineral	Bill number	Introduced by	Tariff asked	Based on	Hearings	Present status
Antimony.....	HR 7193..	McGlennon (N. J.).....	10c. lb.,	Tonnage.	After Sept.,	Ways & Means Committee.
Barytes.....	HR 7658..	Rhodes (Mo.).....	\$10 ton.,	Crude Barytes.....	After Sept.,	Ways & Means Committee.
			15 ton.,	Barium Sulphate.....	After Sept.,	Ways & Means Committee.
			20 ton.,	Barium Compounds.....		
Chrome.....	(Bill	being formulated)		Ores under 50%.....	After Sept.,	Ways & Means Committee.
Graphite.....	HR 5941..	Heflin (Ala.).....	1c. per lb.,	Ores over 50%.....		
			2c. per lb.,	Refined.....		
			3c. per lb.,	Refined.....		
			6c. per lb.,	Products.....		
			5c. per lb.,	Unit Metallic Content.....	After Sept.,	
Manganese.....	HR 5216..	Slemp (Va.).....	35c. per lb.,	Alloys Metallic Content.....		
Magnesite.....	HR 5218..	Hadley (Wash.).....	75c. per lb.,	Tonnage.....	June 16-17..	Ways and Means recommends ore $\frac{1}{2}$ ¢, per lb., calcined $\frac{3}{4}$ ¢. lb., brick $\frac{3}{4}$ ¢. lb., and 10% ad valorem.
			$\frac{3}{4}$ ¢. per lb.,			Ways and Means Committee..
Mercury.....	HR 6658..	Lufkin (Mass.).....	35c. per lb.,	Metallic Content.....	After Sept.,	Ways and Means Committee..
Mica.....	None.....			Ores Metallic Content.....	After Sept.,	Ways and Means Committee.
Molybdenum..	HR 7548..	Taylor (Colo.).....	40c. per lb.,	Products Metallic Content.....	After Sept.,	Ways and Means Committee.
			70c. per lb.,	Unit of Sulphur.....	After Sept.,	Ways and Means Committee.
Pyrites.....	HR 5215..	Slemp (Va.).....	15c. per u.,	\$2.50-\$1.50.....		Mines and Mining Committee.
Potash.....	S 1022..	Henderson (Nev.).....	License.	per unit		
				\$2.50-\$1.50.....	June 10-11-17.	Ways and Means Committee.
				Unit (Ore) WO ³	June 13-14..	Passed House Aug. 21.
Potash.....	HR 4870..	Fordney (Mich.).....	License.	Products Metallic		
Sulphur.....	HR 5215..	Slemp (Va.).....	(See Pyrites)	Zinc Ore 10 to 25% Content.....	June 18..	Ways and Means recommends.
Tungsten.....	HR 4437..	Timberlake (Colo.).....	\$10 per unit	Zinc ore over 25%.....		Ore Zinc 10 to 25% $\frac{1}{4}$ ¢ lb.
			\$1 per lb.,	Zinc blocks pigs or dust.....		Ore Zinc 20 to 25% $\frac{1}{2}$ ¢. lb.
				Zinc sheets.....		Ore More than 25% up 1c. lb.
Zinc.....	HR 6238..	McPherson (Mo.).....	1 $\frac{1}{2}$ ¢. lb.,	Zinc plates.....		Metal Zinc blocks pigs & dust 1 $\frac{3}{4}$ ¢. lb.
			2c. lb.,	Zinc plates.....		Zinc sheets 1 $\frac{3}{4}$ ¢. lb.
			1 $\frac{1}{2}$ ¢. lb.,	Zinc old and worn.....		Zinc plates 1 $\frac{3}{4}$ ¢. lb.
			2c. lb.,			
Lead.....		(Bill being formulated.)	1c. lb.,			

NEED OF PROTECTION FOR MAGNESITE IS POINTED OUT

The House of Representatives received a determined plea for a duty on magnesite when the Committee on Ways and Means reported, in part, as follows:

"Hearings were had upon the bill to determine the question of adequate rates of duty for the protection of the magnesite industry, at which hearings testimony was offered on the part of the Tariff Commission, the Geological Survey, the Bureau of Mines, and the magnesite producers and manufacturers.

"The sworn statements of six of the largest domestic producers were filed with the committee, showing the average cost per ton, without profit, of dead burned magnesite delivered at Atlantic ports to be \$41.20 at the present time. The testimony also showed that the prewar selling price of the Austrian product, including profit, in the United States was \$16.15, making a difference between the present cost, without profit, of American magnesite laid down on the Atlantic seaboard and the prewar selling price of the Austrian product \$25.05.

"While the magnesite producers urged upon the committee that higher tariff rates are necessary than those provided in the amended bill, yet owing to the lack of showing and knowledge of future conditions in Austria with respect to this commodity, and particularly with regard to the cost of the same, and having regard to all the testimony and conditions as presented, the committee resolved the matter upon the basis of the rates specified in the amended bill. They believe that under such rates the domestic producers and manufacturers will be able to compete upon equal terms with the Austrian product.

"In this connection it appears that a quotation has been made for the delivery of Austrian magnesite f. o. b. Atlantic ports at \$26.50 per net ton, as compared with the prewar selling price of \$16.15 above referred to.

"The testimony showed that an ocean rate on Austrian magnesite has been fixed of \$7.50 per ton, as against the prewar rate of approximately \$2 per ton, and as this material is used as ballast it is possible that the ocean rate may be subsequently reduced to approximately that of normal times. On the basis of such quotation for present delivery a differential between the present Austrian selling price, including profit, and American magnesite at Atlantic ports, without profit, is \$14.50 on dead-burned magnesite, and the tariff rate of three-fourths of a cent per pound provided in the amended bill is therefore deemed adequate.

"A tariff of one-half cent per pound has been placed upon crude magnesite ore, as the testimony shows that without protecting the crude material it would be possible to defeat the object of this bill by importing crude magnesite into this country and then manufacturing it into dead-burned or calcined mag-

nesite at such a price as to prevent the production of dead-burned magnesite in this country.

"The testimony further developed the fact that it requires two tons or more of crude magnesite to make one ton of dead-burned or calcined magnesite.

"The testimony shows that magnesite brick consists only of the dead burned magnesite to which water has been added and then pressed into the form of a brick. It was, therefore, necessary to place the same specific duty on the material in the brick as upon dead burned magnesite for the reason that if the brick were imported without this duty they might be broken up and we would have in fact loose dead burned magnesite admitted without specific duty, and would thus defeat the purpose of this bill.

"It was also necessary to place an ad valorem duty of 10 per cent upon the brick in order to cover the estimated difference in cost of manufacturing magnesite brick in Austria and in the United States.

"Austria, since 1888, has been the sole dependence of the United States for magnesite as a refractory mineral—a mineral essential to our welfare in war and peace. Our basic industries, steel, copper, and lead, are dependent upon magnesite as linings for their furnaces, as there is no substitute for magnesite brick.

"The domestic industry was created during the war and on account of the war to furnish these basic industries the magnesite which they required to manufacture war essential material. Permits have already been given to import Austrian magnesite, and the life of the domestic magnesite industry is threatened unless a tariff is granted which will permit the American magnesite industry to maintain itself in competition with Austrian imports.

"The Sixty-fifth Congress passed a bill appropriating \$8,500,000 (Public No. 322, 65th Cong.) to repay the net losses of American producers of pyrites, chrome, and other essential war minerals. Only such minerals as the Interior Department had to urge the production of were included in the bill. These minerals were not dependent alone upon Austria, as in the case of magnesite. The shortage of magnesite was prevented by the prompt action of producers who, knowing the United States was dependent upon Austria alone, were able to calculate a probable shortage during the war, and the government was not compelled to stimulate production of magnesite. Had the magnesite producers failed to produce this material the government would have had to stimulate production, and then the magnesite producers would have been included in the war mineral relief bill and have been repaid for their losses. They were not included for the above reason. The proposed tariff will not repay their losses, but will give the magnesite producers an opportunity to endeavor to earn a profit on their war investment of \$3,500,000, and at the same

time furnish an essential mineral to the steel, copper, and lead industries.

"The quantity of magnesite in the United States was shown by the Geological Survey and the Bureau of Mines to be sufficient to supply requirements of our country for twenty-five or thirty years, with the probability of additional development. In 1913 only one magnesite mine was operating in the United States, located in California, which produced 9,600 tons of crude magnesite per annum. In 1917, sixty-five magnesite mines had been developed in California and Washington, which produced 316,000 tons of crude magnesite, or sufficient to supply the steel, copper, and lead industries when Austrian importations were cut off on account of war. Only about 3 per cent of the domestic consumption of magnesite was produced in this country before the war.

"It would be manifestly a most unwise national and economic policy to fail to afford adequate protection to the industry in question and to permit it to perish, thereby reducing our country again to the position of depending upon a foreign source of supply for this absolutely essential war mineral. The President, in his message to Congress of May 20, 1919, among other things said: "There are parts of our tariff system which need prompt attention. The experience of the war has made it plain that in some cases too great reliance on foreign supply is dangerous."

ANALYSIS OF CAUSES FOR HIGH COSTS OF LIVING IS GIVEN OUT

The Council of National Defense, through Secretary Baker as chairman of the council, has submitted to the President and members of Congress a full report on the concomitants of the high cost of living as surveyed by its Reconstruction Research Division—this in order that various agencies charged with consideration of this problem may take concerted remedial action.

The findings of the council indicate that the high cost of living is primarily due to curtailment in the production of nearly all commodities except raw food products, to hoarding of storage food products, to profiteering, conscious and unconscious, and to inflation of circulating credit; and that the situation may be most advantageously met by stimulated production, the repression of hoarding and profiteering, the improvement and standardization of methods and facilities for distributing and marketing goods, and the perfecting of means of keeping the nation informed regarding probable national requirements and current production and stocks.

The findings particularly emphasize the fact that high standards of living cannot be maintained upon any basis of reduced production.

The report says in part:

"The problem of the high cost of living is so interrelated with other reconstruction

problems that the opening of this problem is tantamount to opening up the question of reconstruction practically in its entirety.

"An analysis of the high cost of living problem brings out the following facts and principles as constituting the essence of the situation:

"1. The only complaints of the high cost of living which have justification are those which are based upon inability of present income to maintain previous or reasonable standards of living at present prices.

"2. America's industrial and economic achievements during the war, notwithstanding depleted man power and diversion of productive effort to war purposes, demonstrate the ample ability of the nation to sustain its population according to a standard of living equal to or above standards of living which obtained previous to or during the war.

"3. The fundamental basis for the maintenance of national standards of living is adequate production, economical distribution and fair apportionment among the various economic groups which constitute our society. With the exception of agricultural activity, production since the armistice has shown evidence of curtailment, and has in general been abnormally low. Normal consumption cannot continue unless an adequate rate of production is maintained.

"4. Food production and the facilities for food production were improved rather than injured during the war. Moreover, the program with respect to food production since the signing of the armistice has been one of vigorous expansion of the means of providing raw food products.

"The number of cattle slaughtered in the period January to May, 1919, was 3,803,000, as against 4,204,000 for the corresponding period of 1918, though the national reserve of cattle on farms had increased during the war. The situation in regard to swine is similar.

"5. The production of civilian cloths and clothing has suffered heavy curtailment for many months since the signing of the armistice.

"Boot and shoe production for civilian use has likewise undergone extreme curtailment since the signing of the armistice.

"Housing facilities, due to curtailment, for many months following the armistice, of the production of building material and of building construction, is still far below normal. Rents continue to rise.

"6. The first half of 1919 shows diminished production of raw materials and subnormal construction of new capital and thus indicates failure to utilize an adequate proportion of our productive forces in the preliminary processes of provision to meet future requirements. In fact, due to business uncertainty and hesitation and tendencies to disagreement between productive groups, there ensued after the armistice a disuse of a large proportion of America's productive capacity. Unless this slump

in production is atoned for by consistent future activity, and unless production is constantly maintained on an adequate scale reduced standards of living will become inescapable, regardless of prices."

The very fact that prices of finished commodities, consumption goods so-called, have risen to an extent out of proportion to the rise in prices of raw materials and perhaps out of proportion to the rise in general wages, indicates that production carried on under these conditions is, in general, yielding profits abnormally high.

The council's report points out that one important factor in the high cost of living lies in the mistaken idea that an increase in income, even though accompanied by a real reduction in the amount of the necessities of life produced, should raise the individual standard of living. The report very carefully points out the fallacy of the belief of the individual that a raise in wages or income under present conditions should alone increase that individual's standard of living. The public does not readily realize an increase in their own income is a case of profiteering, but it should be clear that increased purchasing power, derived from reduced service, is the very essence of profiteering. It is possible on no other basis than the deprivation of others, while a general improvement of real income is possible on no other basis than increased production or improved distribution.

In pre-war times every dollar finding its way to the market was supposedly the counterpart of some existing commodity. Funds expended for the purchase of food, clothing and for the payment of rentals were assumed to have been earned by some productive contribution to the general supply of commodities. With the outbreak of war there began to appear, in the market, funds derived from wages or profits which had been paid in connection with the non-productive activities of war, and which, therefore, implied no corresponding contribution to the supply of commodities.

If current statistics were available showing production, stocks on hand and in transit for all important articles of consumption, this information would serve as an invaluable guide to both producers and distributors, as well as to the consuming public. Such information would indicate from week to week or month to month the sufficiency or insufficiency of current production and available stocks to meet future requirements.

The estimation of future national requirements of consumption goods presents certain problems that are quite capable of approximately accurate solution. The bases of such forecasts are:

1. The record of previous consumption and the law of its variation.
2. Changes in national factors tending to

alter the general trend toward increasing or decreasing national consumption.

3. Calculation based upon the average requirements of the individual family.

Erects New Plant

The Lunkenheimer Company, Cincinnati, manufacturers of valve and engineering appliances, has announced its intention to greatly increase and improve its manufacturing facilities by building a complete new plant. The site selected for the undertaking comprises about 70 acres of land in Carthage, a suburb of the city of Cincinnati, directly on the Toledo division of the Baltimore & Ohio Southwestern Railroad. The location selected is not far distant from the center of the city, is in the heart of one of the manufacturing sections of the city, where labor is plentiful and facilities for the handling of incoming and outgoing freight are ideal.

Plans for the erection of the new buildings are being prepared by capable engineers, and it is expected that work on the new structures will be started within the next few months.

Buildings will be of the one, two and three-story types, of steel and concrete construction, and there will be provided all modern devices for the manufacture, handling and transportation of raw material, part finished and finished products. The undertaking will represent an outlay of approximately \$2,000,000.

The welfare of the employees has been given special consideration. A piece of land of about 8 acres, lying directly opposite the land upon which the main plant is to be located, has been reserved as a recreation center, upon which will be erected an assembly hall, club rooms, baseball grounds, tennis courts, swimming pool, etc. Upon this site will also be erected a dining-room capable of accommodating 1,000 employees at one time.

The Lunkenheimer Company moved to its present location in North Fairmount, Cincinnati, about the year 1900, the plant then comprising two manufacturing buildings, since which time many additional buildings have been erected. Having outgrown its present plant, being sorely in need of additional manufacturing facilities, and there being no more property available in the north Fairmount section, the company determined that the best plan was to acquire acreage property, with a view to providing for the future, as well as present, necessary expansion. The new plant, when complete, will contain about three times as much floor space as now used by the company.

Arrangements are being made so that there will be no interruption to the business of the company while the building operations are in progress, nor while the task of moving into the new plant is under way.

INTEREST IN OIL INDUSTRY UNPRECEDENTED—THE SITUATION

A general summary of the petroleum situation by J. O. Lewis, of the Bureau of Mines, follows:

"There is at the present time a world-wide interest in the oil situation. This has been induced as a result of the war calling attention very strongly to the need of petroleum and its products, both in a military and a commercial sense. These products are principally: Gasoline for automobiles, farm tractors, trucks, aeroplanes, motor boats, etc.; fuel oil for marine propulsion, metallurgical processes, and internal-combustion engines of the Deisel type; and lubricants for all machinery, for which there is no satisfactory substitute quantitatively known. As a result there is great commercial and political interest in petroleum. The British and French governments have taken very strong and active stands in adopting programs towards acquiring sources of supply and in protecting their nationals within their domains and spheres of influence. Commercially there has been a tremendous interest both in Europe and in the United States. This interest has taken the direction of the formation of consolidations backed by large capital and explorations both at home and abroad and the usual side growth of such movements—the formation of many ill-conceived and dishonest promotions in which the public has invested extensively.

"Development in the United States is very active. The prices of crude oil have remained practically constant since the entrance of the United States into the world war, but the future is generally considered so promising commercially by the industry that every effort has been made towards finding new fields, and bringing old fields to a high stage of development has received very wide recognition and prospecting for oil is conducted almost entirely by the large companies upon geological advice. At the present time the chief center of interest is the Paleozoic belt in Texas and the Cretaceous formations in Wyoming. Prospecting is, however, going on extensively in Louisiana, Arizona, New Mexico, Utah, Montana and other states.

"At the present time the principal domestic

source is in the Mid-Continent field, which extends from Kansas through Oklahoma into northern Texas and Louisiana. This district is producing now more than half a million barrels of oil daily, being more than half of the total production of the United States. This oil averages above the rest of the country in quality and the proportion of gasoline obtained from this district is between 60 per cent and 70 per cent of that obtained from the total production of the United States. The production of Oklahoma has declined slightly and that of Kansas has declined greatly since last year, while the production in Texas, particularly in the Paleozoic zones, has largely increased over that of last year, with a present daily production of close to 300,000 barrels. The oil from northern Texas is of an especially high grade and contains a high percentage of gasoline. The prospects are for extending the production considerably in Texas. At the present time the Texas district is supplying our increased needs for gasoline and other products.

"In California, considerable new territory of great promise has been recently developed in the southern part of the state and in the Elk Hills district in Kern County. The latter district is on a geological structure of great size that formerly had been practically condemned, through misunderstanding of the proper drilling methods in such territory. The district is, however, closed to public entry except in a small part, by reason of the establishment of the Naval Reserve and litigation over railroad lands.

"During 1918 some thirty-eight million barrels of oil was imported from Mexico. Imports have been greatly increased during the first half of 1919, and they can be still further extended, according to the need of the United States, as it is chiefly a matter of demand and transportation. A great deal of interest is being displayed in establishing refineries on the Gulf Coast of the Atlantic seaboard to handle Mexican oil, the intention being to export Mexican oil and take off the gasoline and other desirable products, selling the residuum for fuel oil. Refineries for this purpose are being established as follows (figures show initial daily capacity):

	<i>Barrels</i>
Atlantic Refining Company, Brunswick, Ga.....	3,000
Standard Oil Company of New York, Providence, R. I.....
Mexican Petroleum Company, Baltimore, Md.....
Standard Oil Company of New Jersey, Charleston, S. C.....	7,500
Standard Oil Company of Ohio, Toledo, Ohio.....	10,000
Roxana Petroleum Company, New Orleans, La.....
Crown Oil and Refining Company, Houston, Texas.....	5,000
Ohio Cities Gas Company, Newark, Ohio.....	3,000
Sinclair Gulf Corporation, Houston, Texas.....	5,000
Evans-Thwing Refining Company, Fort Worth, Texas.....	5,000
Union Oil Company, San Pedro, Cal.....	10,000
Humble Oil & Refining Company, Houston, Texas.....	10,000
Inland Refining Company, Fort Worth, Texas.....	5,000

"In regard to the petroleum products: Gasoline has remained practically stationary in price during the last two years, with the local tendencies towards cuts in prices; kerosene has increased in price; fuel oil, since the signing of the armistice, has decreased very greatly in price, and its disposal at the present time constitutes the most serious problem in the refinery business east of the Rocky Mountains. There has been a considerable decrease in the price of crude oil in the Gulf Coast fields, where the oil is of low gasoline content, also in the price of Mexican crude oil and for fuel oil distillate from the eastern refineries. Active steps are being taken to establish a wider market for fuel oil, and it is at the present time competing very actively with coal for steam generation along the Atlantic seaboard, particularly in New England. It is anticipated that the completion of the refineries for handling Mexican oil on the Atlantic seaports will induce still stronger competition with coal in our seaports.

"During the late summer and winter of 1918 the stocks of gasoline became reduced to a dangerous minimum. These have been building up during 1919 as a result of increased production and the readjustment since war conditions. The daily average production of gasoline during the month of May was, in 1917, 7,703,749 gallons; in 1918, 10,302,942 gallons; in 1919, 11,434,593 gallons. Stocks have increased from 460,637,479 in May, 1918, to 594,035,688 in May, 1919. Kerosene stocks have, however, decreased greatly, from 343,000,000 gallons to 245,000,000 gallons. Gas and fuel oil stocks have increased from 515,000,000 to 789,000,000 gallons."

COAL CAR SUPPLY IS BASIS OF CONFLICTING CONTENTIONS

The coal car supply has become a bone of contention between coal operators and the Railroad Administration. The Director General of Railroads, replying to a request by the Senate, said, in part:

"During the first five months of the present year open-top cars were regularly available greatly in excess of shippers' orders for the same. The maximum was reached in February and March, when the surplus of open-top cars daily available amounted to the extraordinary totals of 187,339 and 192,933, respectively.

"There has at no time been any shortage of cars for anthracite coal loading.

"As to bituminous coal, there occurred in June a slight shortage in Southern West Virginia, Eastern Ohio and Western Pennsylvania due to an accumulation of cars in lake coal trade, and increased detention of such cars under load at Lake Erie ports awaiting vessels, and also to a strike of railroad shopmen on the Norfolk & Western Railroad.

"Since about July 15, 1919, coincident with a marked upward trend in production, there have been some shortages of cars for loading

with bituminous coal in some producing districts, mainly in Eastern Kentucky, Virginia, West Virginia, Maryland and Pennsylvania, and usually in districts producing the higher grades of coal. A strike of marine workers on coastwise ships, floods and other operating difficulties have contributed to these shortages. Contemporaneously, however, there still exist slight surpluses of open-top cars in some sections, principally in the west.

"Exhibit 'B,' which is attached hereto, shows comparatively for 1919, as far as available, the weekly reports by the Geological Survey of percentage of full-time operation lost by bituminous coal mines in the United States, and the cause of such loss, and indicates that up to July 12 the loss on account of 'car shortages' was a very minor one and relatively much less than that from 'mine causes' and 'no market.' The survey's detailed reports show this information weekly by producing districts and indicate the district situation to be as above stated.

"Some of the practical considerations which will affect the production and transportation of coal during the remainder of this calendar year are the following:

"The ability of the railroads to transport all the bituminous coal required for the rest of this year will, of course, be largely dependent upon the amount required. On that point no accurate information seems to be available. The National Coal Association, however, has advertised that 500,000,000 tons of bituminous coal must be produced in the calendar year 1919 to meet the requirements of the country. This estimate of 500,000,000 tons is just about the production of 1916, a year of great industrial activity, with normal winter weather and normal storage of coal to begin with, whereas in 1919 the year began with storage piles greatly exceeding normal, winter weather was the mildest in history, and industrial activity, due to the readjustment of business following the war, has been at a very low ebb for months. Another element to be kept in mind in estimating the prospective tonnage for which transportation must be furnished is the export movement, of which much has been said to indicate that the tonnage will be large, but with respect to which there is little accurate information readily available.

"It may be noted that during the first six months of 1919 the coal consumption by railroads was about 26,000,000 tons less than in the corresponding period of 1918, during which latter year the fuel coal consumption by railroads aggregated 154,000,000 tons for the twelve months.

"If 500,000,000 tons shall be needed in the present year, the prospects are that its transportation will be accompanied by difficulties, and, especially in view of the heavy business to be expected this fall, it will be exceedingly difficult to transport the amount required. These difficulties will not be due primarily or principally to the car shortage, but rather to

the fact that an abnormal demand for coal will be concentrated into an unusually short period, when the necessary use of the railroads for other purposes will make it difficult to handle the coal.

"If it be assumed that 500,000,000 tons of bituminous coal must be produced during the present year, and we deduct the 250,000,000 tons already produced (according to reports of Geological Survey) to July 26, it will be necessary during the remainder of the year to produce 11,340,000 tons weekly. When we consider what has been done in former years, and especially the maximum which was produced last year under the war influences which enlarged production as well as increased transportation, it is apparent that serious difficulties will be encountered both in the production and in the transportation of the amount of coal necessary in order to produce 500,000,000 tons for the entire calendar year 1919.

in service at the rate of 250 to 275 per day. The railroad shops have been called upon to assist in numbering such cars, and this will increase the daily number of such cars placed in service hereafter. The cars shown as yet to be built are being built and placed in service at the rate of 75 per day, so that from 325 to 350 cars of this class are being put into service daily.

"The composite gondolas are being delayed because two of the large plants have been on strike for the last month and consequently are turning out very few.

"Two plants are building 70-ton low-side cars. One is now on strike."

CALLAHAN'S STATEMENT

In discussing the car situation before the Senate investigating committee, John Callahan, the traffic manager of the National Coal Association, said in part:

"It is our opinion that the United States

OPEN-TOP CARS

	55-ton hopper	Com. Gond.	70-ton hopper	70-ton low side	Total
Number ordered	22,000	20,000	3,000	5,000	50,000
Completed and in service August 26.....	12,935	8,051	762	2,397	24,145
Completed and in storage August 26 (the numbering and placing of these cars in service is now in progress).....	8,186	8,498	794	17,478
To be built.....	879	3,451	2,238	1,809	8,377

"It is highly important to remember that shortage in coal will largely be due to conditions of production having no reference to transportation. For example, in the case of anthracite coal the predominant cause of failure to produce up to the capacity of the mines is shortage of labor, because there has been no shortage of transportation. The same condition is true with respect to bituminous mines in certain fields producing the higher grades of such coal, although at present, shortage of transportation has become a factor in those fields. During the year 1918 extraordinary efforts were made by the government to obtain maximum production and to keep sufficient miners at work and to keep them working under sufficiently high pressure as a measure of patriotism to accomplish this result. The changed conditions in these respects this year may easily limit production in ways having no connection with transportation. These are matters, however, outside the field of the Railroad Administration and are merely suggested without effort to discuss them exhaustively.

"The details of car supply as of August 26 follow. Of the total of 50,000 open-top cars mentioned, 45,000 are available for coal loading.

"The cars shown as being in storage are being numbered by the car works and placed

Railroad Administration is not furnishing enough transportation for bituminous coal to ensure the production and shipment of sufficient coal to meet the requirements of the nation this year. A great deal has been said already about the requirements of the coal industry, from the car supply standpoint; that is, the necessity of coal having cars awaiting it at the mouth of the mine. For purposes of continuity I would like to say again that it is absolutely necessary when coal is brought to the surface of the earth that railroad cars be there to transport it to its place of destination. I would like to say at this time also that it is to be clearly understood that the difficulty today is on account of a transportation deficiency and not a car shortage alone. There is transportation deficiency in addition to a car shortage. It is true that there are some districts in this country receiving sufficient coal cars today, but those districts are the exceptions. The principal coal producing territories, especially those which serve the large industrial districts, are short of cars at this time. There are many, many mines idle on account of no cars today. One day in July 97 mines were idle in the West Virginia district, and for the whole week 285 mines were idle in this district, while neighboring districts had a car supply which did not permit half-time operations."

NATIONAL LEGISLATION

The avalanche of legislation which poured in upon both houses of Congress during this extraordinary session has materially slowed down. But comparatively few bills have been introduced during the last month.

There has been some highly important and significant action on some of the bills already before the House. The Timberlake tungsten bill—H. R. 4437—proposing a tariff of \$10.00 per unit on tungsten ore and \$1.00 per pound on products and alloys, was recommended favorably by the Ways and Means Committee. An amendment was added at the last moment by Mr. Green, of Iowa, to provide a tax for foreign ores now in this country or to be imported which represented a cost of less than \$17.00 per unit; the tax being the difference between the actual cost and \$17.00 per unit. The bill, with this amendment, passed the House by a vote of 173 for and 121 against, and is now before the Senate and referred to the Senate Committee on Finance.

Mr. Hadley's bill for tariff on magnesite—H. R. 5218—was favorably recommended by the Ways and Means Committee, with the following amendments and alterations: One-half cent per pound tariff on ore, calcined and dead burned magnesite $\frac{3}{4}$ cent per pound, magnesite brick and products $\frac{3}{4}$ cent per pound plus 10 per cent ad valorem. This bill is now before the House with the above provisions for the protection by tariff and will be put to vote at an early date.

H. R. 2706, being a bill for tariff on dyestuffs introduced by Mr. Longworth, was favorably reported to the House August 2.

Neither of the two potash bills—S. 1022, introduced by Senator Henderson, or H. R. 4870, introduced by Mr. Fordney—have been reported out of the Ways and Means Committee.

Mr. Smoot's bill—S. 2129—to provide for the repayment of commissions and excess payments on purchase money on public lands, passed the Senate August 2, as also did Mr. Smoot's bill—S. 1729—permitting minors under the age of 18 years to make homestead entries on public lands of the United States.

The Secretary of the Interior favorably recommended S. 1257, being Mr. Myers' bill to provide for agricultural entries on coal lands, and S. 2189, being Mr. Smoot's bill to provide for agricultural entries on coal lands in Alaska.

S. 2822: Reclamation appropriation bill. This bill, introduced by Mr. Jones of Washington, proposes to appropriate the sum of \$250,000,000 to be expended under the terms of the reclamation act already in effect, to continue uncompleted work and to begin new work. This bill referred to the Committee on Irrigation and Reclamation of Arid Lands.

Railroads

S. 2889: Introduced by Mr. Lenroot, provides for the creation and organization of the National Railway Corporation and for the acquisition, control and operation of railroads and water carriers. This to be effected through a corporation to be formed by eleven appointees of the President of the United States—one from the Interstate Commerce Commission, one from the National Association of Railway and Utilities Commissioners, two from the representatives of the employees, two from representatives of the Chamber of Commerce of the United States, two from representatives of farmers and agricultural associations, three from representatives of stockholders of the corporation. The eleven incorporators shall constitute the first Board of Directors—representatives of the employees holding office for two years; representatives of the stockholders for four years, and the remainder for six, eight and ten years, respectively. Thereafter, each director shall be appointed for a term of ten years. The directors shall not engage in any other business or employment and shall receive a salary of \$20,000 per annum and all necessary expenses. The corporation shall at once begin to acquire railroads and lease water carriers to the end that, as promptly as possible, all railroads and water carriers shall be owned and controlled by the corporation. Capital stock shall be issued to bear rate of dividend not less than $3\frac{1}{2}$ per cent and not higher than 6 per cent annual dividend. Proceeds from the sale of such capital stock to be used in acquiring railroads and water carriers. Railroads may be acquired by purchase of the physical assets or the majority of the capital stock, by purchase of bonds or other securities, or by condemnation proceedings. All income above actual expenses and fixed charges shall be distributed as follows: Forty per cent to labor, 30 per cent to stockholders and 30 per cent to the Government of the United States. There shall be connected with this organization an Economy and Efficiency Board to supervise actual operation, made up of appointees by the President of the United States as follows: One proposed by the American Railway Engineer Association, one proposed by the American Society of Chemical Engineers, one proposed by the American Institute of Electrical Engineers, one proposed by the American Association of Civil Engineers, one representing the employees. Each member of this board shall receive a salary of \$15,000 per year and shall serve for two, four, six, eight and ten years, respectively, and thereafter shall be appointed for a term of ten years. This board has no jurisdiction over rates, wages, hours of labor, working conditions, or financial conditions or operations of

the corporation. This bill is referred to the Committee on Interstate Commerce.

H. R. 8157: Introduced by Mr. Sims and referred to the Committee on Interstate and Foreign Commerce. The bill provides for the creation of an Appraisement Board composed of the members of the Interstate Commerce Commission and three other members to be selected by the Board of Directors of the National Railways Operating Corporation, which is created by the act; one from the group of directors elected by the official employees; one from the group elected by the classified employees and one from the group appointed by the President of the United States. The board shall elect its own chairman for such a term as it may determine. Each member of the board receives a salary of \$10,000 per year in addition to the compensation received as a member of the Interstate Commerce Commission or as a director of the National Railways Operating Corporation. This board is empowered to ascertain the amount of compensation to be paid by the United States to the corporate and individual owners of the several transportation properties and also to determine the compensation to be paid to the owners of the properties for manufacturing or repairing, purchase and distribution of stores and supplies, which may be deemed necessary in the operation or extension of transportation properties. In the determination of the amount of compensation to be paid to the owners of transportation properties, the board is to ascertain the value of all the rights, property interests, powers, authorities and privileges granted in and acquired under the charters of the several corporate owners and the laws under which they operate.

All values not included in the grants made in the charters shall be regarded as values retained by the public in the public highways of the United States and not subject to compensation. In the event that the majority of the Appraisement Board fails to agree as to the amount of compensation to be paid, the chairman of the board shall fix the amount, and this amount shall be final and conclusive, subject to the right of judicial review.

The employees of the Appraisement Board come under the direction of the chairman of the board, their compensation being approved by the Secretary of the Treasury. For the purposes of paying the compensation, the Secretary of the Treasury is authorized to issue bonds in such form and subject to such terms of issue, conversion, redemption, maturities, payment and rate and time of payment of interest as the Secretary of the Treasury may prescribe. The principal and interest are payable in gold, but such bonds shall not bear the circulation privilege.

The bill creates in the Treasury a cumulative sinking fund for the retirement of all bonds issued and outstanding under this act. The sinking fund and all additions thereto are appropriated for the payment of such bonds

at maturity or for the redemption or purchase thereof before maturity at such prices and upon such terms and conditions as may be prescribed in the bonds. The sinking fund is to exist until all the bonds are retired.

There is appropriated out of the operating revenue of the National Railways Operation Corporation an amount equal to 1 per cent per annum upon the aggregate amount of bonds outstanding on July 1st of each year, and provides that the annual payment into such sinking fund shall in no year be diminished because of the retirement of bonds previously outstanding. The Secretary of the Treasury must submit to Congress at the beginning of each regular session a separate annual report of the action taken by him under this authority.

The National Railways Operating Corporation has the power to build new extensions and capital improvements, including the construction of railroads along such routes as they shall deem necessary. The bill provides that, in the purchase of public lands hereafter taken up or entered upon, there shall be expressed that there is reserved to the United States the right of way for the construction of railroads, telegraph and telephone lines to such extent on either side of the center line of any such road as the Appraisement Board may deem necessary. The extension of railroad lines in new territory shall be not only by the expenditure of capital funds by the United States, but also by the exercise of power of taxation whereby such territory benefited shall contribute its portion to the cost of the extensions. If a certain region desires its own railway facilities and organizes under the local or regional special assessment laws and will assume that part of the cost of the construction and equipment of the new extension which may be apportioned to it by the Appraisement Board, and will provide such part of the whole cost allotted to it by the board, the building of such extensions by the United States at the specified sharing of costs shall be deemed by the Appraisement Board to be imperative. If the board shall deem it requisite to the public welfare to build an extension through territory which would receive no benefit therefrom, the total cost of construction shall fall upon the public.

The board is required to make a report to the President and to both houses of Congress annually and at any time either may desire a report. Any government employee or official, any member of the board or employees of the board, any director, official employee, or classified employee who shall receive any consideration or benefit either directly or indirectly in excess of his wages authorized by this act, out of the operation of said railways or for any railway undertaking, or by any form of inducement that could influence official action, shall upon official conviction be subject to a penalty of ten times the value of the consideration received and to imprisonment for a term of from one to twenty years.

The National Railways Operating Corporation is created for a term of 100 years. The corporation may hold and own the property, rights and privileges permitted by this charter, and in its name may sue and be sued.

The affairs of the corporation shall be administered by a board of directors of 15 members, to be selected in the following manner: Five directors shall be elected by the classified employees of the railway lines and properties of the United States and its possessions below the grade of appointed officials; five of the directors shall be elected by the official employees of the lines and properties, and five, one of whom shall be designated as chairman and appointed by the President of the United States, by and with the advice and consent of the Senate; not more than three of said appointees shall belong to one political party. The members of each group of five directors are appointed for terms of two, four, six, eight and ten years, their terms thereafter overlapping and for ten years each. The elected directors shall be subject to recall by their electors and the appointed directors to removal by the President for inability or misconduct. Any society of workers, all or some of whose members are wholly or partly employees on the railway lines of the Federal Government, or in any other manner employed by the corporation, may be registered or constitute themselves a trade union and may do anything individually or in combination which the members of a trade union may lawfully do.

It shall be lawful for any person employed under this act to participate in any civil or political action in like manner as if the person were not employed by this corporation, and no person shall suffer dismissal or any deprivation of any kind as a consequence of any political or industrial action not forbidden by the terms of his employment.

The territory of the United States and its possessions is to be divided into operating districts, and shall in each district constitute a District Railway Council, which shall be elected as follows: One-third of the members of the council shall be elected by the classified employees; one-third by the official employees, and one-third by the Board of Directors, one of whom shall be designated as chairman. These members are appointed for terms of one, two, three, four and five years and thereafter for five years each, their terms overlapping.

The corporation is empowered to lease, operate and maintain as a single system all of the railway lines and transportation properties of the United States, shall fix the rates, fares, tolls, dues and charges (under the direction of the Interstate Commerce Commission), shall fix salaries, wages and remuneration and conditions of employment, etc. The corporation is under obligation to produce the highest possible efficiency and economy consistent with good service and that with the working capital and revenues placed in its hands it

shall be obliged to pay all expenses for labor and materials incidental to the proper operation, to provide funds for maintenance and renewals of lines as may be deemed proper from time to time by the Interstate Commerce Commission; to pay out of the operating income semi-annually to the Treasurer of the United States the amount found to be due for sinking fund. All operating revenues received by the corporation in any fiscal year in excess of the amount required to meet the expenditures are declared to be "net earnings." The corporation shall retain the amounts prescribed to be expended for maintenance and renewals and shall at the close of each fiscal year pay into the Treasury of the United States one-half of the net earnings accrued. The remaining one-half of the net earnings is to be retained by the corporation as its corporate funds. The funds from net earnings so paid into the Treasury of the United States shall be held for disbursement only on order of the Appraisal Board to pay for extensions and betterments, for which funds shall be used before capital funds shall become available therefor and accumulation thereof in excess of \$500,000,000 shall be automatically transferred to the sinking fund. The net earnings retained by the corporation are declared to be a trust fund, to be declared as a dividend upon the amounts paid to the labor employed by the corporation, every classified employee receiving that proportion of the dividend accruing to the classified employee which his annual compensation bears to the total compensation of all classified employees, and every official employee receiving that proportion of the dividend accruing to official employees which his annual compensation bears to the total compensation of all official employees, but every official employee receiving twice the rate of dividend that is given to the classified employee.

Whenever the total amount of the net earnings paid into the Treasury of the United States shall exceed 5 per centum of the gross operating revenue, the Interstate Commerce Commission shall adjust the scale of rates in such manner as to absorb the sum, thereby producing a reduction in rates, these rates to be the minimum rates to be charged by the corporation until the next succeeding revision.

The Board of Directors shall create by negotiation with the employees, through their duly elected and authorized representatives, not less than three boards of adjustment, to consist of not less than eight members each, one-half of whom shall be selected by and from the classified employees coming within the jurisdiction of the several boards, and the other one-half selected from the official employees. These boards shall be classified in their jurisdiction over bodies of employees in such manner as the Board of Directors by negotiation with the employees may determine. They shall hear and determine all controversies growing out of the interpretation of

established wage rates and all other disputes arising between official employees and classified employees. The decisions of these boards are to be final except when no majority decision can be obtained, when they may have the right to appeal to the Board of Directors. The Board of Directors is authorized to create a central board of wages and working conditions, one-half from the official employees and one-half selected by and from the classified employees. It is the duty of this board to investigate and determine matters presented by official and classified employees respecting the question of salaries, wages, hours and other conditions of employment throughout the unified railway system. The decisions of this board shall be final, except when no majority decision can be obtained, when they have the right to appeal to the Board of Directors.

H. R. 8690: Homestead Relief Bill, introduced by Mr. Taylor of Colorado, provides that any homestead entryman on 160 acres or less of lands may file additional entries under provisions of stock raising homestead act, to make total holdings of not to exceed 640 acres, or additional entry under enlarged homestead act to make total holdings not exceeding 320 acres. This bill referred to the Committee on Public Lands.

H. R. 8624: Food and Fuel Administration, reported by Mr. Haugen from the Committee on Agriculture, proposes an amendment to the food and fuel administration bill of August 10, 1917, and makes it further unlawful to destroy, restrict the supply or distribution, or lessen manufacture or production of any necessities of life and proposes a fine of \$5,000 or imprisonment of not more than two years for violations of the provisions of the original act, and further provisions of this act. This bill exempts from the penalties of this act any agriculturist who is an original producer of foods.

H. R. 8580: To reserve lands needful for municipal water supply. This bill proposes to authorize the President to reserve and set aside either mineral or non-mineral lands of the United States which are essential for the protection of water supply of any municipality making application for such reservation. Bill referred to the Committee on Public Lands.

Treaty Making

H. J. Res. 164: Vesting the Power of Treaty Making in Both the Senate and House of Representatives.—Introduced by Mr. Griffin and referred to the Committee on the Judiciary. The resolution provides that Article II of the Constitution of the United States be so amended that the power of treaty

making shall be vested in the House of Representatives jointly with the Senate.

H. J. Res. 166: Introduced by Mr. James and referred to the Committee on the Judiciary. This resolution provides an amendment to the Constitution whereby Congress shall be forbidden to conscript armies to serve outside the United States to execute the orders of any international body or tribunal.

Taxation

H. R. 7915: Introduced by Mr. Timberlake and referred to the Committee on Ways and Means. The bill amends Section 800 of the Revenue Act of 1918, as follows:

(6) A tax of $1\frac{1}{2}$ cents for each 10 cents or fraction thereof of the amount paid for admission to any public performance for profit at any roof garden, cabaret or other similar entertainment, to which the charge for admission is wholly or in part included in the price paid for refreshment, service or merchandise, the amount paid for such admission to be deemed to be 20 per centum of the amount paid for refreshment, service or merchandise; such tax to be paid by the person paying for such refreshment, service or merchandise.

However, no tax shall be levied on any amount paid for admission to and within permanently located outdoor recreation amusement places the maximum charge for which is 25 cents.

H. J. Res. 150: Annual Assessment. Introduced by Mr. Hawley and referred to the Committee on Mines and Mining, from which committee it was reported July 28, with amendments. The bill as originally reviewed by us carried the words, "Providing further that this resolution shall not apply to oil, oil locations or claims." This was stricken out in committee. However, the resolution passed both houses and has been signed by the President.

Tariff

H. R. 8078: To Regulate the Importation of Coal-Tar Products. Introduced July 31 by Mr. Longworth and referred to the Committee on Ways and Means. The committee referred the bill back to the House on August 1 without amendment. This bill has been reviewed in the columns of the MINING CONGRESS JOURNAL.

Famous Mine Worked Out

Due to the low tenor of the ore at the Granby Consolidated Mining, Smelting & Power Company's Phoenix plant, operations have come to an end there. During the past twenty years 271,079,000 pounds of copper have been produced by that plant.—Bureau of Mines and Mineral Investigations.

Arid Lands

H. R. 8864: Introduced by Mr. Raker and referred to the Committee on Arid Lands. The bill provides that the Secretary of the Interior shall grant to any person or corporation the exclusive right for the period of two years to drill or explore for water beneath the surface of not exceeding 2,560 acres of arid, unreserved, unappropriated, non-mineral, non-timbered public lands of the United States, in the State of California, lying east of the Sierra Nevada Mountains.

Soldiers and Public Lands

H. R. 8820: The Soldiers' and Sailors' Farm Settlement Act, introduced by Mr. McFadden, provides members of military and naval forces with capital for farm settlements after discharge from service or being placed on inactive duty. The amount to be loaned to each individual shall not exceed \$6,000 nor be less than \$100. It is proposed to appropriate \$100,000,000 for this purpose to be made available through the Federal Farm Loan Board. Referred to the Committee on Banking and Currency.

Oil Shale

S. 2671: Introduced by Mr. Henderson and referred to the Committee on Mines and Mining. The bill authorizes the Secretary of the Interior to make experiments and investigations through the Bureau of Mines of oil shale, to determine the commercial and economic practicability of its utilization as a commercial product. One hundred and forty thousand dollars is appropriated to carry on the expense of the investigation.

S. 2722: Introduced by Mr. King and referred to the Committee on Mines and Mining. The bill appropriates \$500,000 to be expended under the direction of the Secretary of the Interior for the erection of an experimental petroleum shale refining plant at Ogden, Utah, for the purpose of investigating and developing the methods for the extraction of petroleum from oil shale. The work of investigation, experimentation and development is to be under the supervision of the Bureau of Mines.

High Cost of Living

H. J. Res. 174: Introduced by Mr. Riddick and referred to the Committee on Agriculture. The resolution is as follows:

Requesting the President to employ the means directly within his power to relieve the people of the United States from the high cost of living imposed by administrative methods.

Whereas the primary causes of the high cost of living, due to and correctible by administrative action are:

1. Government extravagance and waste, creating fictitious prices and causing heavy taxation to be loaded on the cost of the necessities of life.

2. The purchase and hoarding by the War Department of vast quantities of food, clothing and other materials acquired at profiteer prices and causing general prices to rise in sympathy.

3. The exportation in vast quantities of necessities for the relief of foreign populations, thus decreasing the supply of staples in the United States.

4. The continued inflation of the currency under the Federal Reserve Act, causing a depreciation of the value of the dollar.

5. The encumbering of the pay roll with hordes of unnecessary and unproductive government employees.

6. The failure and refusal of the administration to enforce existing federal statutes prohibiting combinations in unfair restraint of trade.

H. R. 8261: Introduced by Mr. Sumners and referred to the Committee on Agriculture. The bill provides for the establishment of a farm produce exchange, with such branches as may be necessary, to be conducted by the Department of Agriculture. The Secretary of Agriculture shall keep advised with the details of the quantity, quality, location and price of agricultural products, and the volume and location of demand in the United States and abroad, and the price at which such products may be sold, and shall make such information available to the producer and purchaser of such products, and shall endeavor to bring about such system in the sale and distribution of such products as shall eliminate the waste and extremes in prices resulting from the present lack of system.

Business License

H. R. 8315: Introduced by Mr. Siegel and referred to the Committee on Interstate and Foreign Commerce. The bill requires that every person in the United States, before transacting business either as manufacturer, jobber, wholesaler or retailer, shall be required to obtain, from the collector of the district wherein he transacts business, a license or permit to transact business for the period of one year. It also provides that if any person engaged in business shall fail to mark his goods plainly with the actual cost of the article and the price at which it shall be sold he shall be guilty of profiteering and shall be subject to a fine of not to exceed \$5,000, imprisonment for more than two years, or both.

H. Res. 229: Introduced by Mr. Flood and referred to the Committee on Interstate and Foreign Commerce. The resolution author-

izes the Federal Trade Commission to inquire into the price of fertilizer and all classes of farm machinery, to ascertain the manufacturers' cost price, the retailers' cost and selling prices, and report to the House of Representatives at the earliest possible date the result of such investigation.

Coal.—H. R. 8115: Introduced by Mr. Hudleston and referred to the Committee on the Judiciary. The bill intends to provide for the encouraging of the distribution of necessities, preventing their sale at excessive prices, punishing conspiracies relating to excessive prices and regulating distribution and sale of necessities. The provisions of the act cease to be in effect at the expiration of five years after the termination of the war between the United States and Germany. A fine of \$5,000 or imprisonment for not more than five years, or both, is provided for failure to act in accordance with the provisions of the act, which provides for a War Trade Commission composed of five members to be appointed by the President without confirmation by the Senate, each member to receive an annual salary of \$5,000 and to hold office during the will of the President. The commission is authorized to appoint agents and employees at its discretion, to fix the maximum sale, use and service prices for necessities, to adopt regulations for the distribution, transportation and handling of same, and to license dealers, agents, etc. The bill makes it unlawful for any person to sell, either directly or indirectly, any necessary at a price greater than the maximum price fixed by the War Trade Commission, or if no price has been fixed by the commission, to sell for a greater amount than such necessary was sold for on November 11, 1918. It makes necessary the marking in legible, plain figures the original cost of the article and the selling price thereof. The bill appropriates \$1,000,000.

Food, Fuel and Necessaries.—H. R. 8120: Introduced by Mr. James and referred to the Committee on Appropriations. The bill authorizes the President of the United States to requisition food, fuel and other necessities and to sell same at reasonable prices to the public. The President shall have the power to requisition storage facilities for such supplies, and he shall ascertain and pay a just compensation for such necessities. If the compensation is not satisfactory to the person who receives it, they shall be paid 75 per cent of the amount determined by the President and shall be entitled to sue the United States to recover such further sum as will make up the amount which they believe to be just compensation. The President is directed to sell at reasonable prices such food, fuel and other necessities, which shall be distributed through the Parcel Post service. For the purpose of carrying out the provisions of the

bill, \$10,000,000 is appropriated. The President is authorized to make regulations and to use such means and agencies of the government as in his discretion he may deem best. Any money received by the United States in connection with the disposal of such necessities shall be used as a revolving fund to further carry out the purposes of the act.

Labor

International Conference.—S. J. Res. 80: Introduced by Mr. Kenyon and referred to the Committee on Foreign Relations. The bill authorizes the President to convene and make arrangements for the organization of the first meeting of an International Labor Conference, and appoint delegates thereto. This bill is similar to H. J. Res. 171, introduced by Mr. Gould, except that it provides that the President shall not appoint delegates to represent the United States at the meeting, or authorize the United States to participate therein unless the Senate shall ratify the provisions of the proposed treaty of peace, with reference to such general International Labor Conference.

International Conference.—H. J. Res. 171: Introduced by Mr. Gould and referred to the Committee on Foreign Affairs. The resolution provides that the President of the United States be authorized to convene and make the arrangements for the organization in October, 1919, for a meeting of an International Conference of business men and employers, and to appoint delegates thereto and to invite the representatives of the allied and associated powers and Germany to participate.

War Minerals Producers

H. J. Res. 170: Introduced by Mr. Garland and referred to the Committee on Mines and Mining. The resolution provides for the equitable administration of Section 5 of the act of March 2, 1919, providing for relief for war minerals producers as intended by Congress, and to limit the liability of the government thereunder to the appropriation already made. The resolution is as follows:

Whereas, in Section 5 of the act of March 2, 1919 (Fortieth Statutes, page 1272), provision was made to repay producers of chrome, tungsten, manganese and pyrites net losses suffered by them in an effort to comply with the requests or demands of the government agencies therein to produce the said minerals required by the exigencies of the war and appropriating the sum of \$8,500,000 therefor; and

Whereas, under the said act claims were filed in a total sum in excess of \$15,000,000; and

Whereas, it was intended in the passage of said act that all producers of the minerals mentioned should be repaid such sums as they

were in equity and good faith entitled; and

Whereas, under the said act, as construed by the Attorney General of the United States and as interpreted by the commission appointed to administer said act, relief will be denied to many claimants for whom Congress intended to provide: Therefore, be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That a liberal interpretation be adopted in the administration of said act, and that all those claimants who in response to any personal, written or published request or demand from any of the governmental agencies mentioned in said act in good faith expended money in producing or preparing to produce any of the ores or minerals named therein in their usual or requisite commercial form, for the purposes described in said act, and have therefore filed their claims within the time and in the manner prescribed in said act, be reimbursed such net losses as they be found to have incurred and are in equity entitled from the appropriation provided in said act; but in the event that said appropriation is not sufficient to liquidate all claims allowed in accordance herewith, such claims shall be paid a pro rata share of the appropriation provided in said act.

SEC. 2. That 50 per centum of the amount of any adjudicated claim shall without prejudice be paid immediately after adjudication.

Public Lands

H. R. 7981: Introduced by Mr. Vaile and referred to the Committee on Mines and Mining, providing that where public lands containing deposits of gold or iron ore have heretofore been located in good faith under the placer-mining laws of the United States and assessment work has been annually performed thereon, such locations shall be valid and may be perfected under the provisions of said placer-mining laws, and patents whether heretofore or hereafter issued thereon shall give title to and possession of such deposits.

H. R. 487: Introduced by Mr. Mondell and referred to the Committee on Public Lands, providing for employment and rural homes for those who have served with the military and naval forces. The bill provides for the establishment of a fund in the Treasury Department to be known as the "National Soldiers' Settlement Fund," to be administered by the Secretary of the Interior. The Secretary is authorized to acquire by purchase, gift, deed in trust or otherwise, the necessary lands for soldier settlement projects, and may withdraw, utilize and dispose of by contract and deed public lands suitable for such purposes. The Secretary is authorized to encourage any such undertakings, to perform such work as

in his opinion is necessary for the permanent reclamation or development of the lands, and when he deems essential to place them in condition for use and cultivation, including the building of essential public roads. The bill limits the loan provision to soldiers at \$1,200. The land projects are to be subdivided into farms suitable for the support of a family, and, in the discretion of the Secretary, into smaller farm workers' tracts. Approved applicants shall at the time of entering into contract or purchase make a first payment of 5 per cent of the sale price. The balance shall be paid in amortizing payments extending over a period to be fixed by the Secretary, not to exceed forty years. Sums advanced for improvements shall be repaid in amortizing payments extending over a period not to exceed twenty years. The amortizing payments shall bear interest at the rate of 4 per cent, payable annually, computed from the date of contract. The Secretary is authorized to make loans, not to exceed \$800 at any one time, to soldiers for the purpose of purchasing the necessary live stock and equipment, which loans shall be paid back within five years with interest at 4 per cent. Five hundred million dollars is appropriated to carry out the purpose of the act. This bill has been before the House Committee on Public Lands, but was reported favorably to the House of Representatives on August 1. It is expected that early action will be taken on this bill.

H. J. Res. 167: Introduced by Mr. Raker and referred to the Committee on Public Lands. This resolution provides that Section 2296 of the Revised Statutes shall be made applicable to all entries made under the Homestead Laws. The House Committee on Public Lands reported this resolution to the House on August 1.

France Loses on Surplus Copper

A peculiar situation has been recently pointed out in France. It is stated that the French Government sold to American producers the stocks of copper formerly purchased from them at a loss of about \$200 a ton. This copper may be sold to French consumers by La Societe Franco-Americaine des Metaux, an agent of the American Export Association, at prices which will show a profit over the cost price. Furthermore, this society being an agent of a foreign concern, will not be considered as making a profit in France and will therefore escape taxation. By this situation the French suffer three-fold, first, by a loss on the original sale; second, by a loss to consumers on account of increased price, and, third, by the loss of taxation.—Bureau of Mines Mineral Investigations.

PERSONALS

Van H. Manning, Director of the Bureau of Mines, was at Salt Lake City August 19, 20 and 21, in the course of a tour of inspection of the stations of the bureau. In interviews and an address delivered at Salt Lake City he emphasized the importance of oil shale development to meet the increasing demands for oil and gasoline. Dr. Manning was the guest of the directors of the Utah Chapter, American Mining Congress, at luncheon August 21. Speaking at the luncheon, he reviewed the war activities of the bureau, discussed its general plans for future activities, and invited the cooperation and constructive criticism of the mining industry.

Mr. S. Pemberton Hutchinson, president of the Westmoreland Coal Company, Philadelphia, was a recent visitor at the American Mining Congress offices.

Herbert Wilson Smith, chief of the Tariff Division of the American Mining Congress, has resumed his duties after a short visit to his home in Santa Fe, New Mexico.

Judge A. Scott Thompson, of Miami, Okla., chairman of the American Mining Congress Committee on Taxation, spent a few days in Washington recently in connection with tax matters.

Mr. Paul Armitage has returned to New York after attendance at a meeting of the American Mining Congress Committee on Taxation.

Mr. H. N. Lawrie, chief of the Precious and Rare Metals Division of the American Mining Congress, has returned from New York, where he spent several days collecting gold data.

Mr. H. G. Winston of Chicago spent several days at the Washington office recently.

Mr. S. G. Little has been appointed manager of the Pittsburgh district, mine car department, Hyatt Roller Bearing Company, with his offices in rooms 1272-73 Frick Annex, Pittsburgh, Pa. Mr. Joseph S. Larkin, sales engineer, will assist Mr. Little in the Pittsburgh district.

Mr. J. E. Graham is now located as sales engineer in the Huntington district, mine car department, Hyatt Roller Bearing Company, assisting Mr. Nash, the manager of that district.

Iron Works in the Orient

The principal ironworks in the Orient are reported as follows: Taoshung mines, containing 20,000,000 to 30,000,000 tons of ore, supplies the Oriental Ironworks Co.; Taiyeh mine, containing about 50,000,000 tons, supplies the Government Ironworks at Yawata, Japan, also smelters near the mine to supply the Yawata ironworks with pig iron. At Anshan-ghan ironworks of the South Manchuria Railway Co., furnaces are being set up and further enlargements are proposed. Large deposits of iron ore are reported in this neighborhood.

May Get Iron from France

France has offered to supply basic pig iron to Great Britain at a price far below the British and will undertake to supply 10,000 tons a week for four months. This iron comes from German-owned furnaces in Lorraine, now controlled by the French Government.

There is a great scarcity of pig iron in England and this offer may be accepted. The feeling in England seems to be that the admission of foreign trade in pig iron would only be an entering wedge which might seriously hamper British producers in the future.

Butte Situation Improved

The threatened labor unrest at Butte in the early part of July has been considerably ameliorated by the abolishment of the sliding scale of wages based upon the market value of copper, and the substitution of a higher wage rate. Industrial relations in Butte have been materially bettered by this action.—Bureau of Mines Mineral Investigations.

Metallurgical Exchange Opened

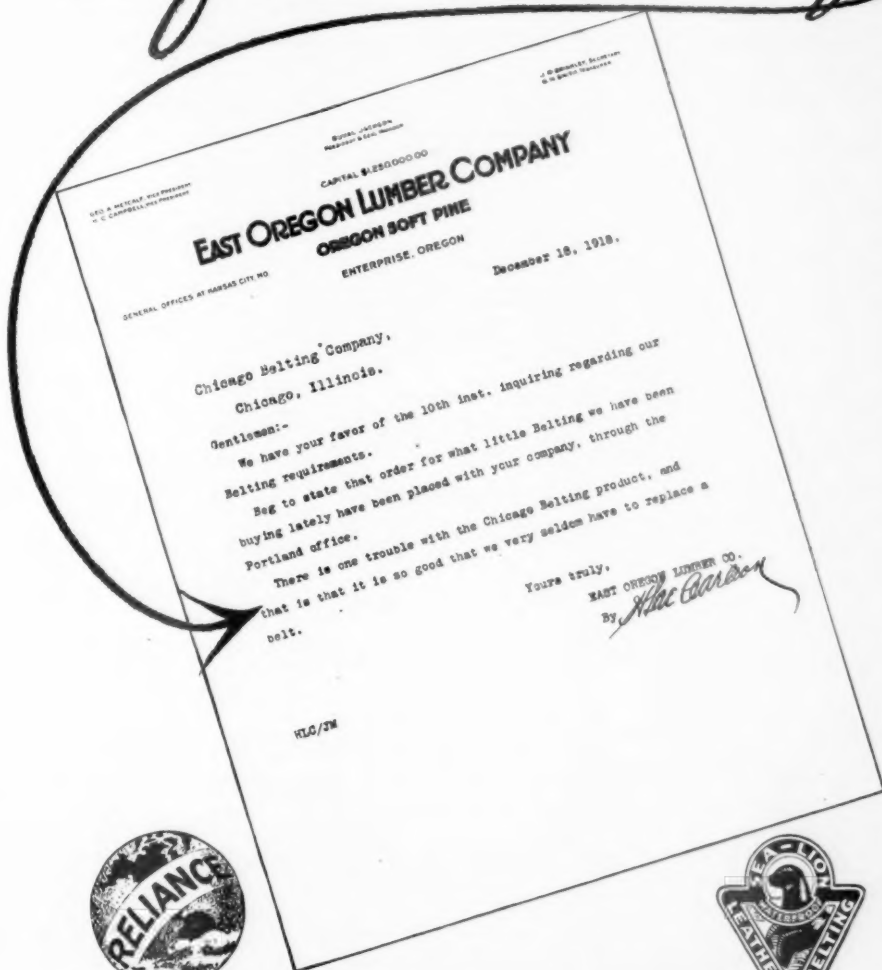
The Societe de Valeurs pour Fers et Acier in Schaffhausen, Switzerland, has established a metallurgical exchange in Zurich for the purpose of assisting the machine industry.

Owing to the constantly increasing demand for Jeffrey products in the Detroit district, we have opened a new branch office in Detroit in the Book building, on Washington street, between State and Grand avenues.

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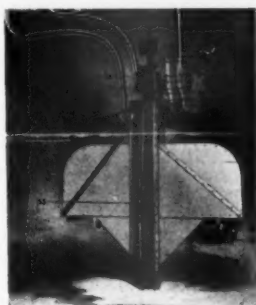
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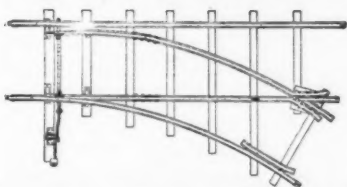
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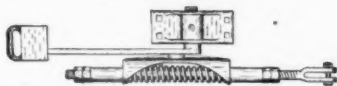
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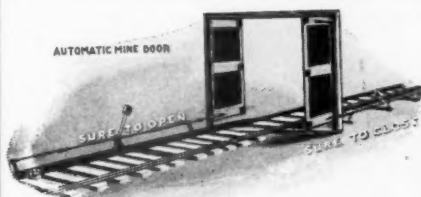
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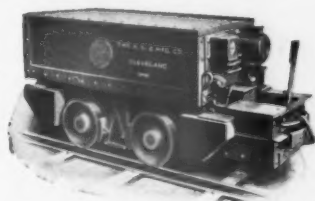


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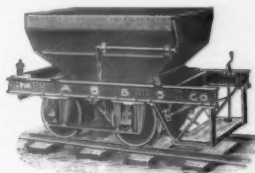
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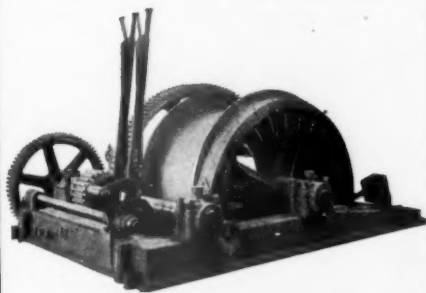
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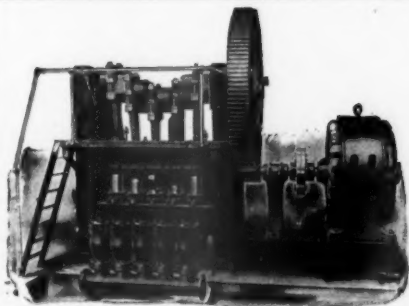
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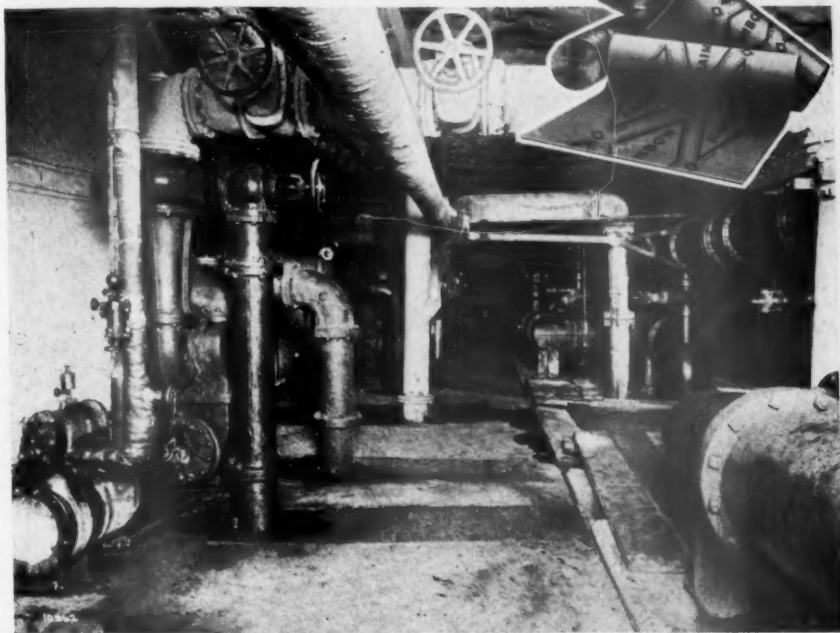
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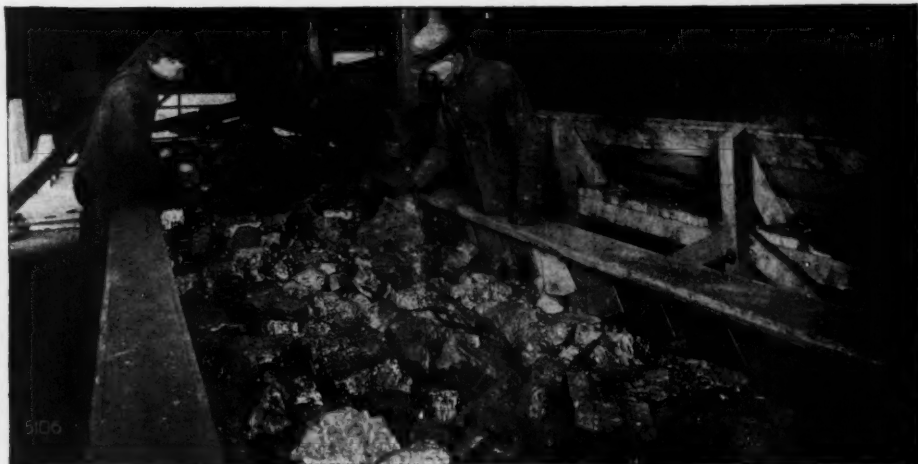
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